

# Comprehensive Annual Financial Report for the fiscal year ended June 30, 2003

The Public School &  
The Non-Teacher School Employee



**M. Steve Yoakum**

Executive Director

**Prepared by:**

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## Mission Statement

**The Public School Retirement System of Missouri and the Non-Teacher School Employee Retirement System of Missouri (PSRS and NTRS)** work in partnership with the member school districts of this state to provide eligible employees and their beneficiaries with a significant source of income based on the employee's length of service and compensation in order to enhance retirement, disability and death benefits received from other sources.

It is the fiduciary responsibility of those charged with administration of PSRS and NTRS to:

- ❖ effectively collect contributions,
- ❖ prudently invest the assets to obtain optimum returns,
- ❖ equitably provide benefits, and
- ❖ impartially and in accordance with applicable law administer the benefit programs.

The Board of Trustees and staff are committed to providing services to the members and beneficiaries professionally, promptly, courteously, and efficiently.

## Mission Statement Principles

- ❖ We will conduct the business of the retirement systems in accordance with the mission statement.
- ❖ We will act as fiduciaries in the management of all funds for the exclusive benefit of our members.
- ❖ We will adhere to our investment policy to ensure the highest possible investment return consistent with the prudent investment of plan assets.
- ❖ We will have as our goal the replacement of 80% of a member's final average salary after a 30-year career through the combination of income from public pensions and, where applicable, the federal Social Security system.
- ❖ We shall have as our goal the retention of purchasing power of the initial retirement benefit through the retirement years.
- ❖ We will maintain an independent retirement system that retains the power of the trustees to set actuarial assumptions, appoint consultants, employ staff, establish a budget and conduct all business of the retirement systems.
- ❖ We will prepare and distribute an annual financial report that adheres to generally accepted accounting principles.
- ❖ We will provide prompt, courteous and accurate service to our members.
- ❖ We will provide clear and complete information to the members and the districts through the use of a summary plan document, newsletters, an annual member account statement and any other documents deemed necessary.
- ❖ We will adhere to the highest standards of ethical conduct.

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**Board of Trustees**

**Transmittal Letter**

**Certificate of Achievement in Financial Reporting**

**Organizational Chart**

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## **INTRODUCTORY SECTION**

## Board of Trustees

As of June 30, 2003

### Wayne Wheeler

Chair

Elected PSRS Member

Term Expires 6/30/04



### Peggy Preston

Vice-Chair

Elected PSRS Member

Term Expires 6/30/04



### Cheryl Boggess

Elected PSRS Member

Term Expires 6/30/06



### J. Richard Franklin

Appointed Retired Member

Term Expires 6/30/07



### Nancy Gaines

Elected NTRS Member

Term Expires 6/30/06



### Lynn Harmon

Appointed Member

Term Expires 6/30/03



### John Kruse

Appointed Member

Term Expires 6/30/06





December 1, 2003

**TO: Board of Trustees and Members of the Retirement Systems:**

I am pleased to present the *Comprehensive Annual Financial Report* of the Public School Retirement System of Missouri (PSRS) and the Non-Teacher School Employee Retirement System of Missouri (NTRS) for the fiscal year ended June 30, 2003. The management and staff of the Systems are responsible for the accuracy and completeness of this report and for ensuring that all material disclosures have been made. To the best of our knowledge, the information presented is a fair and accurate portrayal of the financial position and operations of PSRS and NTRS as of June 30, 2003.

***Report Contents***

This report is presented in five sections:

- The Introductory Section contains general information about the Retirement Systems;
- The Financial Section contains the independent auditors' report, management's discussion and analysis of the financial statements, the financial statements and related notes, and required supplemental schedules;
- The Investment Section contains a summary of the investment activities during the year, including investment performance;
- The Actuarial Section reports the funded condition of both Systems, including a summary of major actuarial assumptions; and
- The Statistical Section contains general information concerning members, benefit recipients and finances.

***Overview of the Retirement Systems***

The Public School Retirement System of Missouri, a cost-sharing multiple employer retirement system, was established in 1946 by an act of the Missouri legislature to provide retirement, disability and death benefits to full-time, certificated employees in the public schools and four-year regional universities. It has been amended to include part-time certificated employees of public schools and no longer accepts new employees of the regional colleges and universities.

The Non-Teacher School Employee Retirement System of Missouri, also a cost-sharing multiple employer retirement system, was established in 1965 by an act of the Missouri legislature to provide retirement, disability and death benefits to non-certificated school employees in the public schools, community colleges and junior colleges who have elected to join the System.

***Financial Information***

The Systems' financial statements are prepared in accordance with generally accepted accounting principles (GAAP) within the guidelines established by the Governmental Accounting Standards Board (GASB). A system of internal

controls is in place to help monitor and safeguard assets and promote efficient operations. An independent certified public accounting firm selected by the Board of Trustees performs a financial audit each year. In addition, the Systems employ an internal auditor who performs operational reviews to ensure that the internal controls are functioning effectively.

Please refer to the Management's Discussion and Analysis on pages 17 through 21 for an overview of additions to and deductions from the plans for the fiscal year.

### ***Investment Activities***

The past fiscal year proved to be a difficult period for all institutional investors, including PSRS/NTRS, as the equity markets continued to languish. However, our disciplined investment approach and conservative strategy (including a high allocation to bonds) allowed PSRS/NTRS to outperform most of our peers during this period. The combined investment portfolios generated a 4.8% return for the fiscal year. This return ranked in the top 35% of returns for large institutional pension systems.

### ***Funding Status***

PSRS and NTRS are defined benefit retirement systems. This means that a formula made up of credit (years of service) times final average salary, times a multiplier (2.5% for PSRS and 1.61% for NTRS) determines each member's retirement benefit. The actuarial accrued liability is calculated for each System using the plan provisions in effect at the time of the calculation. Actuarial assumptions used in the calculation are recommended by the system's outside actuary and are based upon prior experience of the plans.

To determine the relative health of the Systems, the actuarial accrued liability is compared to the actuarial value of assets to arrive at a funded percentage. As of June 30, 2003, PSRS was 81.1% funded, while NTRS was 81.9% funded. This is a reduction from the June 30, 2002 funded ratios of 95.3% for PSRS and 97.6% for NTRS. This substantial drop in funded percentages from the prior year is due primarily to the restatement of the actuarial value of assets to the market value of assets.

Previously, the actuarial value of assets was determined using a "smoothing" method that requires all gains (earnings in excess of 8%) and losses (earnings below 8%) to be recognized over a five-year period. If we earned the assumed rate of return each year, the actuarial value and the market value of assets would be equal. However, due to the unprecedented decline in the market since March 2000, the market value of assets declined at a faster rate than the actuarial value of assets. To more accurately reflect the funding status of the Systems, the actuarial value of assets was adjusted to equal the market value of assets for both Systems at June 30, 2003. We believe that this restatement presents a more accurate financial picture for our members and will not affect the required contribution rates.

### ***Major Initiatives During 2002-2003***

SCS for HCS for HB's 346 and 174 was enacted during the 2003 legislative session. This legislation affects both PSRS and NTRS as summarized below:

- **Partial Lump Sum Option (PLSO)**

Under this new benefit payment option, qualified members can elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time lump sum payment at retirement equal to 12, 24, or 36 times the Option 1, single-life benefit amount. To qualify to elect the PLSO, a member must have a minimum of 33 years of service, or be at least 63 with a minimum of 8 years of service, or have their years of service plus their age equal 86 or greater (Rule of 86).

- **25-and-Out Retirement**

The 25-and-Out window was extended through July 1, 2008. This provision was set to expire on July 1, 2003. This provision allows members with at least 25 years of service credit, who are not eligible to retire under the full formula, to retire using a reduced formula factor.



- **Credit Purchases**

Service credit purchases are now calculated using the highest salary on record multiplied by the total current contribution rate (for the employee and the employer). Previously, most calculations were made using actuarial assumptions and demographic information specific to the member, such as age and years of service. This method makes it easier for members to estimate the cost to purchase service now and in the future. In addition, the amount of supplemental credit that can be purchased was increased from four-tenths to five-tenths of a year of service.

- **Contribution Rate Limits**

The Board of Trustees is now required to set the contribution rates based upon the annual actuarial valuations of the Systems. Although the maximum contribution rate cap was removed, annual contribution rate increases are limited to 1% for PSRS ( $\frac{1}{2}\%$  for the employer and  $\frac{1}{2}\%$  for the employee) and  $\frac{1}{2}\%$  for NTRS ( $\frac{1}{4}\%$  for the employer and  $\frac{1}{4}\%$  for the employee). The total rates for the 2003-2004 school year remained at 21% for PSRS and 10.5% for NTRS.

Based upon the June 30, 2003 actuarial valuations, the Board of Trustees has set the 2004-2005 contribution rates at 22% for PSRS and 11% for NTRS. The annual required contribution rates recommended by the actuary were 27.75% for PSRS and 12.47% for NTRS. The approved rates were set in accordance with the annual contribution rate increase limits set forth in the statute.

All new provisions took effect August 28, 2003, except for the 25-and-Out provision which took effect July 1, 2003.

### **Awards**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PSRS and NTRS for the *Comprehensive Annual Financial Report* for the fiscal year ended June 30, 2002. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports. To be awarded the Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents meet or exceed program standards. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for only one year. We believe our current report continues to meet the Certificate of Achievement program requirements and are submitting it to GFOA for consideration again this year.

### **Professional Services**

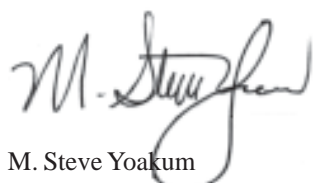
Certain professional services are provided to the Retirement Systems by retained consultants. The required opinion letters from two of those consultants, Gabriel, Roeder, Smith and Company, actuaries, and Williams Keepers LLC, independent certified public accountants, are contained elsewhere in this report.

Investment consulting services, as well as investment manager search assistance and investment performance analysis, has been provided by Strategic Investment Solutions of San Francisco, CA.

### **Acknowledgements**

I would like to express my thanks and gratitude to the Board of Trustees, staff, and consultants who have worked diligently to produce this report and to ensure the successful operation of the Retirement Systems.

Respectfully submitted,



M. Steve Yoakum  
Executive Director



Lori Woratzeck  
Chief Financial Officer

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

The Public School Ret. System  
of Missouri and the Non-Teacher  
School Employee Ret. System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2002

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



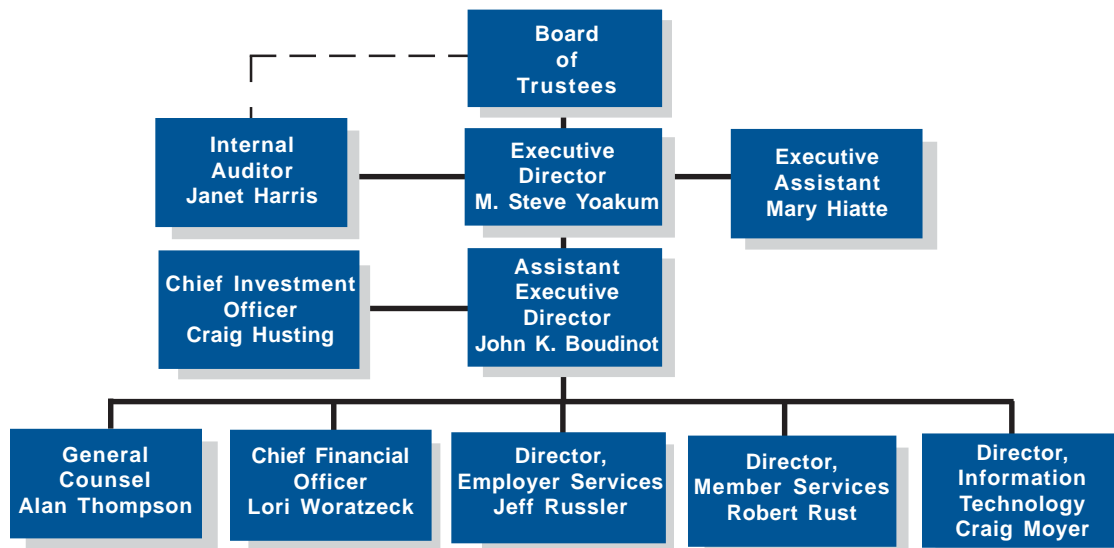
President

Executive Director



## Administrative Organization

June 30, 2003



# Professional Services

June 30, 2003

## Actuary

### Gabriel, Roeder, Smith & Co.

Actuaries and Consultants  
Norman S. Losk, F.S.A.  
Alex Rivera, A.S.A.  
Roseville, California

## Auditor

### Williams Keepers, LLC

Michael J. Oldelehr, CPA  
Jill S. Hatfield, CPA  
Jefferson City, Missouri

## Computer Consultants

### Huber & Associates, Inc.

James Huber  
Jefferson City, Missouri

### Mitten Software

Jim Morgan  
Minnetonka, Minnesota

### Total Network Integration

Kirt Dunwoody  
Jefferson City, Missouri

## Insurance Consultant

### Charlesworth & Associates

Bob Charlesworth  
Overland Park, Kansas

## Legal Counsel

### Thompson Coburn

#### Attorneys at Law

Allen Allred  
St. Louis, Missouri

### Blackwell Sanders Peper Martin, LLP

Michael R. Annis  
St. Louis, Missouri

## Legislative Consultant

Jack Pierce  
Jefferson City, Missouri

## Medical Advisor

Dr. Robert H. Tanner  
Jefferson City, Missouri

## Investment Management Consultant\*

### Strategic Investment Solutions, Inc.

Michael R. Beasley  
San Francisco, California

## U.S. Equity Investment Advisors\*

### Alliance Capital Management

John A. Koltjes  
Elizabeth Smith  
Minneapolis, Minnesota

### Aronson & Johnson & Ortiz, LP

Ted Aronson  
Martha Ortiz  
Philadelphia, Pennsylvania

### Chartwell Investment Partners

Edward Antioian  
Timothy Riddle  
Berwyn, Pennsylvania

### DSI International

John Holmgren, Jr.  
Norwalk, Connecticut

### State Street Global Advisors

Doug Holmes  
Anne Eisenberg  
Jim Thorsen  
Boston, Massachusetts

### Thomson, Horstmann & Bryant, Inc.

Richard Horstmann  
Al Thomson  
Saddle Brook, New Jersey

### Trust Company of the West (TCW)

Glen Bickerstaff  
Brian Beitner  
Los Angeles, California

### UBS Global Asset Management

John Leonard  
Steven E. Wilde  
Chicago, Illinois

## International Investment Advisors\*

### Bank of Ireland Asset Management

Jane Neill  
Lelia Long  
Dublin, Ireland

### BPI Global Asset Management

Dan Jaworski  
Ryan Burrow  
Orlando, Florida

### INVESCO Global Asset Management

Erik Granade  
Kirk Holland  
Atlanta, Georgia

### Oechsle International Advisors

Kathleen Harris  
Jamie Macmillan  
Boston, Massachusetts

## Fixed Income Investment Advisors\*

### BlackRock Financial Management

Andy Phillips  
Robert Capaldi  
New York, New York

(continued)

## Professional Services *(continued)*

### **NISA Investment Advisors**

Jess Yawitz  
Robert Krebs  
St. Louis, Missouri

### **Payden & Rygel**

Brian Matthews  
Michael Salvay  
Los Angeles, CA

### **State Street Global Advisors**

Joe Marvan  
Jim Thorsen  
Boston, Massachusetts

### **Wellington Management Co., LLP**

Tom Pappas  
Alexander Grant  
Boston, Massachusetts

### **Master Trustee/Custodian\***

#### **State Street Bank and Trust Company**

R. Scott Paton  
Steve Davies  
Boston, Massachusetts

### **E-MAPU.S. Equity Advisors\***

#### **Analytic Investors, Inc.**

Harindra de Silva  
Los Angeles, California

#### **Legg Mason Capital Management**

Bill Miller  
Baltimore, Maryland

#### **New Amsterdam Partners**

Michelle Clayman  
New York, New York

### **Next Century Growth Investors, LLC**

Tom Press  
Minneapolis, Minnesota

### **Systematic Financial Management**

D. Kevin McCreesh  
Teaneck, New Jersey

### **Westwood Management Corporation**

Susan Byrne  
Dallas, Texas

### **Zevenbergen Capital, Inc.**

Nancy Zevenbergen  
Seattle, Washington

\*Information on investment management and consulting fees can be found in the Schedule of Investment Expenses on page 60.



**Independent Auditors' Report**

**Management's Discussion and Analysis**

**Basic Financial Statements**

**Required Supplementary Information**

**Schedule of Administrative Expenses**

**Schedule of Investment Expenses**

**Schedule of Professional/Consultant Fees**

## **FINANCIAL SECTION**



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CERTIFIED PUBLIC ACCOUNTANTS & CONSULTANTS

JEFFERSON CITY  
COLUMBIA  
MEXICO

## INDEPENDENT AUDITORS' REPORT

The Board of Trustees  
Public School Retirement System of Missouri  
Non-Teacher School Employee Retirement System of Missouri

We have audited the accompanying statement of plan net assets of the Public School Retirement System of Missouri and the Non-Teacher School Employee Retirement System of Missouri (the System) as of June 30, 2003 and the related statement of changes in plan net assets for the year then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with U.S. generally accepted auditing standards. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Public School Retirement System of Missouri and the Non-Teacher School Employee Retirement System of Missouri at June 30, 2003 and the changes in plan net assets for the year then ended, in conformity with U.S. generally accepted accounting principles.

The management's discussion and analysis on pages 17 through 21 are not a required part of the basic financial statements but are supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was made for the purpose of forming an opinion on the financial statements taken as a whole. The supplementary schedules of funding progress and employer contributions on pages 33 and 34 are not a required part of the basic financial statements of the System, but are required by the Governmental Accounting Standards Board (GASB). The supplementary information included on pages 35 through 37 is presented for purposes of additional analysis and is not a required part of the basic financial statements of the System. Such information, included on pages 33 through 37, has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

*Williams - Keepers LLC*

August 29, 2003



# Management's Discussion and Analysis

June 30, 2003

This discussion and analysis of the financial position of the Public School Retirement System and the Non-Teacher School Employee Retirement System (collectively referred to as the Systems) provides an overview of the Systems' financial activities for the fiscal year ended June 30, 2003. We encourage you to consider the information presented here in conjunction with additional information presented in the financial statements and required supplementary information.

## Financial Highlights

The combined net assets of the Systems at June 30, 2003 were \$21.7 billion. The net assets were up \$0.7 billion from June 30, 2002. This increase was primarily due to the increase in the fair value of investments of \$495.1 million.

The overall investment return for the Systems was 4.8%. The diversified asset allocation provided downside protection and positive returns for the Systems in a year when the broad U.S. stock market (represented by the Russell 3000 Index) was up just 1% and non-U.S. equities (represented by the MSCI ACWI ex U.S. index) was down 4.2%. The Systems' return ranked in the top 35% of returns for large institutional pension systems.

The Systems' funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. This funding shall be carried out in such a way to ensure that the burden of paying retirement costs shall be shared equitably by present and succeeding generations of members and taxpayers.

As of June 30, 2003, the funded ratios were 81.1% for PSRS and 81.9% for NTRS. As of June 30, 2002, the funded ratios were 95.3% for PSRS and 97.6% for NTRS. This large drop in funded ratios was primarily the result of the restatement of the actuarial value of assets to the market value of assets as of June 30, 2003. This one-time adjustment recognizes all losses incurred through June 30, 2003. Without this restatement of assets, these losses would be recognized over the next five years resulting in 2003 funded ratios of 92.6% for PSRS and 92.9% for NTRS. Although either method is generally acceptable, we feel the restatement more accurately reflects the current funding of the Systems. Because of the declining funded ratios, we anticipate contribution rate increases for the 2005 school year.

Revenues for the year were \$1.8 billion. This figure is comprised of contribution revenue of \$0.8 billion and investment income of \$0.9 billion. Other miscellaneous revenues contributed \$0.1 billion.

Expenses increased 7.8% over the prior year from \$967.0 million to \$1.0 billion. Most of this increase represents increased retirement benefits paid to members.

## Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the financial report of the Systems. The financial report consists of:

The basic financial statements, comprised of the Statement of Plan Net Assets and the Statement of Changes in Plan Net Assets; the notes to the basic financial statements; and the required and other supplementary information.

The Statement of Plan Net Assets (page 22) presents information on the assets and liabilities of the Systems, with the difference between the two reported as net assets. The net assets of the Systems reflect the resources available to pay benefits to members when due. Over time, increases and decreases in net assets measure whether the Systems' financial position is improving or deteriorating.

The Statement of Changes in Plan Net Assets (page 23) presents information detailing the changes in net assets that occurred during the current fiscal year. All changes in net assets are reported on an accrual basis. This means that the revenue or expense is recognized as soon as the underlying event giving rise to the change occurs, regardless of when the actual cash is received or paid. Thus, revenues and expenses are reported in this statement for some items that will not result in cash flows until future fiscal periods. For example, contributions due from a district, even though not yet paid by year end, will be reflected as revenue. Earned vacation accruals will be reflected as an expense, even though they have not been paid to employees.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes can be found on pages 24 through 32. The report also contains required supplementary information in addition to the basic financial statements themselves. The Schedules of Funding Progress (page 33) include historical trend information about the actuarially funded status of each plan from a long-term, ongoing perspective and the progress made in accumulating assets to pay benefits when due.

The Schedules of Employer Contributions (page 34) present historical trend information about the annual required contributions of employers and the actual contributions made by employers.

Other supplementary schedules are also included. The Schedule of Administrative Expenses (page 35) presents the overall cost of administering the Systems. The Schedule of Professional/Consultant Fees (page 37) further details this category of administrative expense.

The Schedule of Investment Expenses (page 36) shows the costs associated with investing the assets of the Systems. These expenses are shown as a reduction of revenue on the Statement of Changes in Plan Net Assets.

### Financial Analysis of The Public School Retirement System

The Public School Retirement System (PSRS) is a mandatory cost-sharing multiple employer retirement system for full-time certificated employees and certain part-time employees of participating employers. PSRS members were required to contribute 10.5% of their annual covered salary during 2003. The employer was required to match that amount. Most PSRS members do not contribute to Social Security, except for employees hired after 1986 who contribute to Medicare only.

### Assets

Total assets of PSRS as of June 30, 2003 were \$24.3 billion and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased by \$1.2 billion or 5.1% from the prior year primarily due to increased investment earnings.

### Liabilities

Total liabilities as of June 30, 2003 were \$4.2 billion and were mostly comprised of obligations under security lending arrangements and payables from the purchase of investments. Total liabilities increased by \$.5 billion. This increase was primarily due to an increased liability for the purchase of investments.

### Net Assets

System assets exceeded liabilities at June 30, 2003 by \$20.0 billion. This was up from 2002 net assets of \$19.4 billion by \$0.6 billion. This increase was primarily due to an increase in investment earnings due to improving market conditions. In addition, benefit payments and other expenses exceeded contribution revenue by \$229.2 million. This trend is a natural progression in a mature defined benefit plan.

### Public School Retirement System Plan Net Assets (000's)

	<u>2003</u>	<u>2002</u>	<u>Change</u>
Cash and investments	\$ 23,039,370	\$ 22,474,060	\$ 565,310
Receivables	1,248,772	636,018	612,754
Other	9,561	9,925	(364)
Total assets	<u>24,297,703</u>	<u>23,120,003</u>	<u>1,177,700</u>
 Total liabilities	 <u>4,249,721</u>	 <u>3,716,526</u>	 <u>533,195</u>
 <b>Plan net assets</b>	 <u><u>\$ 20,047,982</u></u>	 <u><u>\$ 19,403,477</u></u>	 <u><u>\$ 644,505</u></u>

### Public School Retirement System Changes in Plan Net Assets (000's)

	<u>2003</u>	<u>2002</u>	<u>Change</u>
<b>Additions</b>			
Member contributions	\$ 378,434	\$ 356,684	\$ 21,750
Employer contributions	355,979	340,000	15,979
Investment income (loss)	873,340	(582,958)	1,456,298
Other	351	2,762	(2,411)
Total additions	<u>1,608,104</u>	<u>116,488</u>	<u>1,491,616</u>
<b>Deductions</b>			
Monthly benefits	930,450	860,435	70,015
Refunds of contributions	28,474	31,779	(3,305)
Administrative expenses	4,674	4,439	235
Other	1	47	(46)
Total deductions	<u>963,599</u>	<u>896,700</u>	<u>66,899</u>
<b>Change in plan net assets</b>	<u>\$ 644,505</u>	<u>(\$ 780,212)</u>	<u>\$ 1,424,717</u>

#### Revenues – Additions to Plan Net Assets

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contributions for the year increased by \$37.7 million to \$734.4 million. This was a 5.4% increase over the prior year. Retirement contributions are calculated at 10.5% of retirement salary for each member. The employer matches this amount. Members may also pay contributions to reinstate previously withdrawn service credit or to purchase various types of elective credit.

The net investment gain was \$873.3 million as compared to a net investment loss of \$583.0 million in 2002. The PSRS one-year return of 4.8% compared favorably to other systems, which on average, gained 4.3% for the year. The PSRS one-year return exceeded the average pension fund return (universe of large institutional investors) for the third year in a row. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

Other income was down substantially due to the one-time gain on the sale of the previous administration building of \$1.4 million in 2002.

#### Expenses – Deductions from Plan Net Assets

The primary expenses of PSRS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2003 were \$963.6 million, an increase of 7.5% over fiscal year 2002.

Benefit expenses increased by \$70.0 million. This was a result of cost-of-living increases applied to the benefits of current retirees and the addition of 2,094 new service and disability retirees. Refunds of contributions decreased by \$3.3 million to \$28.5 million. This is probably a reflection of the current market conditions. Members might feel that the stated return of 6% earned on their account balances with PSRS is an attractive choice compared to other investment options.

Administrative expenses increased by \$0.2 million to \$4.7 million. This was a 5.3% increase. This increase was primarily due to the addition of five staff members during the year, which has enabled us to better serve our members. The cost of these positions was charged 60% to PSRS and 40% to NTRS. In addition, our new administrative building was completed during fiscal year 2002. Fiscal year 2003 reflected the first full year of depreciation charges for the new building.

## Financial Analysis of the Non-Teacher School Employee Retirement System

The Non-Teacher School Employee Retirement System (NTRS) is a mandatory cost-sharing multiple employer retirement system for non-certificated employees and certain part-time certificated employees of participating employers. NTRS members were required to contribute 5% of their annual covered salary during 2003. The employer was required to match that amount. NTRS members also contribute to Social Security.

### Assets

Total assets of NTRS as of June 30, 2003 were \$2.0 billion and were mostly comprised of cash, investments, and contributions due from employers. Total assets increased by \$0.1 billion or 6% from the prior year primarily due to increased investment returns.

### Liabilities

Total liabilities as of June 30, 2003 were \$320.3 million and were mostly comprised of obligations under security lending arrangements and payables from the purchase of investments. Total liabilities increased by \$26.7 million. This increase was also primarily due to an increased liability for the purchase of investments.

### Net Assets

NTRS assets exceeded liabilities at the close of fiscal year 2003 by \$1.7 billion. This was up from 2002 net assets by \$0.1 billion. This increase was primarily due to an increase in investment earnings due to improving market conditions. Because NTRS is a much younger plan than PSRS, contribution revenues exceeded benefit payments and other expenses by \$19.5 million.

### Revenues – Additions to Plan Net Assets

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contributions for the year increased by \$5.9 million to \$97.9 million. This was a 6.5% increase over the prior year.

Retirement contributions are calculated at 5% of retirement salary for each member. The employer matches this amount. Members may also pay contributions to reinstate previously withdrawn service credit or to purchase various types of elective credit.

The net investment gain was \$73.2 million as compared to a net investment loss of \$46.7 million in 2002. The NTRS one-year return of 4.8% compared favorably to other systems, which on average, gained 4.3% for the year. The NTRS one-year return exceeded the average pension fund return (universe of large institutional investors) for the third year in a row. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

### Expenses – Deductions from Plan Net Assets

The primary expenses of NTRS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2003 were \$78.4 million, an increase of 11.5% over fiscal year 2002.

Benefit expenses increased by \$7.5 million. This was a result of cost-of-living increases applied to the benefits of current retirees and the addition of 997 new service and disability retirees. There were no changes to the benefit formula during 2003. Refunds of contributions increased by \$0.2 million to \$8.0 million. This total amount still remains low compared to years prior to 2002. This is probably a reflection of the current market conditions. Members might feel that the stated return of 6% earned on their account balances with NTRS is an attractive choice compared to other investment options.

Administrative expenses increased by \$0.4 million to \$2.9 million. This was a 14.5% increase. This increase was primarily due to compensated absence expenses being allocated to NTRS for the first time. Previously, all compensated absence expenses were charged to PSRS. The addition of five staff members during the year also contributed to this increase. The cost of these positions was charged 60% to PSRS and 40% to NTRS. In addition, the portion of shared expenses allocated to NTRS increased from 39% to 40% in 2003. This allocation is based upon the number of members served in each System.

**Non-Teacher School Employee Retirement System  
Plan Net Assets (000's)**

	<u>2003</u>	<u>2002</u>	<u>Change</u>
Cash and investments	\$ 1,892,077	\$ 1,827,470	\$ 64,607
Receivables	105,998	51,174	54,824
Other	-	1	(1)
Total assets	<u>1,998,075</u>	<u>1,878,645</u>	<u>119,430</u>
Total liabilities	<u>320,305</u>	<u>293,628</u>	<u>26,677</u>
<b>Plan net assets</b>	<u><u>\$ 1,677,770</u></u>	<u><u>\$ 1,585,017</u></u>	<u><u>\$ 92,753</u></u>

**Non-Teacher School Employee Retirement System  
Changes in Plan Net Assets (000's)**

	<u>2003</u>	<u>2002</u>	<u>Change</u>
<b>Additions</b>			
Member contributions	\$ 48,994	\$ 46,217	\$ 2,777
Employer contributions	48,933	45,773	3,160
Investment income (loss)	73,188	(46,732)	119,920
Other	16	26	(10)
Total additions	<u>171,131</u>	<u>45,284</u>	<u>125,847</u>
<b>Deductions</b>			
Monthly benefits	67,399	59,871	7,528
Refunds of contributions	8,033	7,866	167
Administrative expenses	2,946	2,574	372
Other	-	1	(1)
Total deductions	<u>78,378</u>	<u>70,312</u>	<u>8,066</u>
<b>Change in plan net assets</b>	<u><u>\$ 92,753</u></u>	<u><u>\$ (25,028)</u></u>	<u><u>\$ 117,781</u></u>

## Summary

Due to the long-term nature of defined benefit pension plans, it is important to look at the financial performance of the Systems over a period of years and not just at this single point in time. Although the Systems have not met the 8% return assumption with the current five-year return of 3.5%, management will continue to strive to improve the financial position of the Systems through a prudent investment program and long-term strategic planning.

## Requests for Information

This financial report is designed to provide the Board of Trustees, our members, and other users of our financial report with a general overview of the Systems' finances and to demonstrate the Systems' accountability for the money received. If you have any questions about this report or need additional financial information, contact the Public School and Non-Teacher School Employee Retirement System, P.O. Box 268, Jefferson City, MO 65102.

## Statements of Plan Net Assets

As of June 30, 2003 with the comparative totals for June 30, 2002

	TOTALS			
	PSRS	NTRS	June 30, 2003	June 30, 2002
<b>ASSETS</b>				
Cash	\$ 55,520,755	\$ 24,570,982	\$ 80,091,737	\$ 44,545,364
Receivables				
Contributions	109,067,460	9,806,091	118,873,551	121,208,894
Accrued interest and dividends	73,777,171	6,361,519	80,138,690	97,019,086
Investment sales	1,065,714,969	89,823,942	1,155,538,911	468,717,028
Due from NTRS	94,105	-	94,105	79,234
Other	118,116	5,974	124,090	167,448
Total receivables	1,248,771,821	105,997,526	1,354,769,347	687,191,690
Investments, at fair value				
Fixed income	9,629,223,541	796,985,078	10,426,208,619	10,636,455,791
Domestic stocks	7,489,874,245	613,781,139	8,103,655,384	7,135,799,607
International equities	2,742,880,271	225,457,780	2,968,338,051	2,995,345,687
Short term investments	1,026,676,673	75,096,973	1,101,773,646	643,226,942
Total investments	20,888,654,730	1,711,320,970	22,599,975,700	21,410,828,027
Invested securities lending collateral	2,095,194,779	156,184,659	2,251,379,438	2,846,156,361
Prepaid expenses	191,069	-	191,069	177,131
Capital assets, net of accumulated depreciation	9,369,445	-	9,369,445	9,749,363
Total assets	24,297,702,599	1,998,074,137	26,295,776,736	24,998,647,936
<b>LIABILITIES</b>				
Accounts payable	7,048,880	549,776	7,598,656	7,013,540
Interest payable	1,474,387	126,829	1,601,216	351,009
Securities lending collateral	2,095,194,779	156,184,659	2,251,379,438	2,846,156,361
Investment purchases	2,145,805,458	163,224,108	2,309,029,566	1,156,266,830
Due to PSRS	-	94,105	94,105	79,234
Lease liability	10,036	-	10,036	19,619
Compensated absences	187,522	125,015	312,537	267,223
Total liabilities	4,249,721,062	320,304,492	4,570,025,554	4,010,153,816
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<u>\$ 20,047,981,537</u>	<u>\$ 1,677,769,645</u>	<u>\$ 21,725,751,182</u>	<u>\$ 20,988,494,120</u>
<i>(Schedules of funding progress for the plans are presented on page 33.)</i>				

See accompanying Notes to the Financial Statements.



# Statements of Changes in Plan Net Assets

For the year ended June 30, 2003 with comparative totals for the year ended June 30, 2002

	TOTALS			
	PSRS	NTRS	2003	2002
<b>ADDITIONS</b>				
<b>Contributions</b>				
Employer	\$ 355,979,027	\$ 48,933,326	\$ 404,912,353	\$ 385,773,675
Member	378,434,127	48,994,009	427,428,136	402,901,788
Total contributions	734,413,154	97,927,335	832,340,489	788,675,463
<b>Investment income</b>				
<i>From investing activities:</i>				
Net appreciation (depreciation) in fair value of investments	456,091,771	39,016,895	495,108,666	(1,117,414,499)
Interest from investments	298,109,813	24,457,616	322,567,429	386,306,061
Interest from bank deposits	87,039	4,975	92,014	116,294
Dividends	133,210,704	10,944,770	144,155,474	107,086,968
Total investment income (loss)	887,499,327	74,424,256	961,923,583	(623,905,176)
Less investment expenses	26,289,195	2,225,613	28,514,808	25,243,072
Net income (loss) from investing activities	861,210,132	72,198,643	933,408,775	(649,148,248)
<i>From security lending activities:</i>				
Security lending gross income	47,649,593	3,914,488	51,564,081	66,992,694
Less security lending activity expenses:				
Agent fees	3,227,248	261,289	3,488,537	4,456,245
Broker rebates	32,292,969	2,664,266	34,957,235	43,079,357
Total security lending expenses	35,520,217	2,925,555	38,445,772	47,535,602
Net income from security lending activity	12,129,376	988,933	13,118,309	19,457,092
Total net investment income (loss)	873,339,508	73,187,576	946,527,084	(629,691,156)
<b>Other income:</b>				
NTRS capital asset charge	240,353	-	240,353	223,160
Miscellaneous income	111,180	15,859	127,039	2,564,491
Total other income	351,533	15,859	367,392	2,787,651
Total additions	1,608,104,195	171,130,770	1,779,234,965	161,771,958
<b>DEDUCTIONS</b>				
Monthly benefits	930,449,641	67,398,657	997,848,298	920,306,125
Refunds of contributions	28,474,288	8,033,535	36,507,823	39,645,251
Administrative expenses	4,674,174	2,945,847	7,620,021	7,013,643
Other expenses	1,453	308	1,761	46,617
Total deductions	963,599,556	78,378,347	1,041,977,903	967,011,636
Net increase (decrease)	644,504,639	92,752,423	737,257,062	(805,239,678)
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>				
Beginning of year	19,403,476,898	1,585,017,222	20,988,494,120	21,793,733,798
End of year	\$ 20,047,981,537	\$ 1,677,769,645	\$ 21,725,751,182	\$ 20,988,494,120

See accompanying Notes to the Financial Statements.

# Notes to the Financial Statements

June 30, 2003

(with comparative information for June 30, 2002)

## Note 1 — Plan Descriptions

The Board of Trustees of the Public School Retirement System administers two separate retirement systems, the Public School Retirement System of Missouri (PSRS) and the Non-Teacher School Employee Retirement System of Missouri (NTRS). The Board of Trustees consists of seven members, three of whom are elected PSRS active members, one an elected active member of NTRS and three persons appointed by the governor, one of whom must be a retired member of either PSRS or NTRS.

The funds of the two Systems are invested in conjunction with each other but each system retains title to its own investments. Each System's assets may be used only for the payment of benefits to the members of the separate System in accordance with the statutes governing that System.

### The Public School Retirement System

The Public School Retirement System of Missouri (PSRS) is a mandatory cost-sharing multiple employer retirement system for all full-time certificated employees and certain part-time certificated employees of all public school districts in Missouri (except the school districts of St. Louis and Kansas City) and all public community colleges. The System also includes certificated employees of PSRS, Missouri State Teachers' Association, Missouri State High School Activities Association, and certain employees of the state of Missouri who elected to remain covered by PSRS under legislation enacted in 1986, 1987 and 1989.

PSRS was established as an independent trust fund by an Act of the Missouri General Assembly effective August 1, 1945. Statutes governing the System are found in Sections 169.010-169.141 and Sections 169.560-169.595 RSMo. It is a defined benefit plan providing service retirement, death and

disability benefits to its members. Members are vested for service retirement benefits after accruing five years of creditable service. Individuals who are (a) at least age 60 and have a minimum of five years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service credit and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 2.5% formula factor.

Beginning July 1, 2001, and ending June 30, 2008, a 2.55% formula factor is used to calculate benefits for members who have 31 or more years of service. Actuarially age-reduced benefits are available for members with five to 24.9 years of service at age 55 or with 25 years of service (if not yet age 55). Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of credit may retire with a lesser benefit formula factor during a window that will close July 1, 2008. Annual cost-of-living adjustments (COLAs) are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional retirement plans, up to a lifetime maximum of 80% of the original benefit amount.

**Contributions** — PSRS members were required to contribute 10.5% of their annual covered salary during both fiscal years. The employing districts were required to match the contributions made by employees. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions set in Section 169.030 RSMo. Administrative costs are financed through investment earnings. Contributions for employees of the state of Missouri were made by the state in accordance with the actuarially determined contribution rate needed to fund current costs and prior service costs of state employees as authorized in Section 104.342.8 RSMo.

**Members** — The number of PSRS membership and benefit recipients served by the System at June 30 was:

	<u>2003</u>	<u>2002</u>
Retirees and beneficiaries receiving benefits	32,249	30,865
Inactive members entitled to but not yet receiving benefits	5,031	4,588
Active members:		
Vested	51,580	50,489
Non-vested	22,767	23,184
Total active members	74,347	73,673
Other inactive members	5,300	4,788
Total	<u>116,927</u>	<u>113,914</u>

**Employers** — PSRS had 546 contributing employers during both years.



### **The Non-Teacher School Employee Retirement System**

The Non-Teacher School Employee Retirement System of Missouri (NTRS) is a mandatory cost-sharing multiple employer retirement system for all public school district employees (except the school districts of St. Louis and Kansas City), employees of the Missouri Association of School Administrators, and community college employees (except the Community College of St. Louis). Employees of covered districts who work 20 or more hours per week on a regular basis and who are not contributing members of the Public School Retirement System of Missouri (PSRS) must contribute to NTRS. Employees of PSRS who do not hold Missouri teaching certificates also contribute to NTRS.

NTRS was established as a trust fund by an Act of the Missouri General Assembly effective October 13, 1965. Statutes governing the Retirement System are found in Sections 169.600 - 169.715 and Sections 169.560-169.595 RSMo. The statutes place responsibility for the operation of NTRS on the Trustees of the Public School Retirement System.

NTRS is a defined benefit plan providing service retirement and disability benefits to its members. Members are vested for service retirement benefits after accruing five years of creditable service. Individuals who are (a) at least age 60

and have a minimum of five years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service credit and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 1.61% formula factor. Members qualifying for "Rule of 80" or "30-and-Out" are entitled to a temporary .8% benefit multiplier until reaching minimum Social Security age (currently age 62). Actuarially age-reduced retirement benefits are available with five years of service at age 55. Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of credit may retire with a lesser benefit formula factor during a window that will close July 1, 2008. Annual cost-of-living adjustments (COLAs) up to a lifetime maximum of 80% of the original benefit amount are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional retirement plans.

**Contributions**— NTRS members were required to contribute 5.0% of their annual covered salary during both years. The employing districts were required to match the contributions made by their employees. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions in Section 169.620 RSMo. Administrative costs proportional to its membership size are reimbursed by NTRS to the Public School Retirement System and are financed through investment earnings.

**Members**— The number of NTRS membership and benefit recipients served by the System at June 30 was:

	<b><u>2003</u></b>	<b><u>2002</u></b>
Retirees and beneficiaries receiving benefits	14,837	14,270
Inactive members entitled to but not yet receiving benefits	3,002	2,768
Active members:		
Vested	21,408	20,181
Non-Vested	<u>25,455</u>	<u>26,547</u>
Total active members	46,863	46,728
Other inactive members	<u>14,649</u>	<u>13,145</u>
Total	<u><u>79,351</u></u>	<u><u>76,911</u></u>

**Employers**— NTRS had 536 contributing employers during both years.

## Note 2 — Summary of Significant Accounting Policies

**Basis of Accounting** — The financial statements of both Systems were prepared using the accrual basis of accounting. For both Systems, member and employer contributions are required by state statute and are recognized in the period in which the employee services are performed. Benefits and refunds are recognized when due and payable in accordance with the statutes governing the Systems. Expenses are recognized when the liability is incurred, regardless of when payment is made.

**Cash** — Cash includes cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

**Receivables** — Receivables consist primarily of contributions owed and yet to be remitted by the employing districts, pending investment trades and interest and dividends payable to the Systems as of the end of each fiscal year.

**Method Used to Value Investments** — Investments are reported at fair value on a trade date basis. Securities traded on international exchanges are valued at the last reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. Investments that do not have an established market are reported at estimated fair value.

**Capital Assets** — The building and most other capital assets are owned by PSRS and are stated at cost less depreciation accumulated since acquisition. The stated value does not purport to represent replacement or realized value. Costs of major additions and improvements are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from three to 40 years in the following major classes: computers and software, three years; vehicles, five years; equipment, five years; building and land improvements, 15 years; building, 40 years.

NTRS owns office equipment purchased before 1997 and follows the same guidelines for depreciation. NTRS reimburses PSRS for the use of capital assets used by the two Systems on a proportional basis. The amount of this reimbursement was \$240,353 in 2003 and \$223,160 in 2002.

**Capital Lease** — PSRS entered into a three-year lease agreement during 2001-2002 for a color copier. This agreement qualifies as a capital lease for accounting purposes, and therefore, has been recorded at the lower of fair market value or the present value of the future minimum lease agreement. The future minimum lease obligation and the net present value of these payments as of June 30, 2003 was \$10,036.

**Estimates** — The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of net assets held in trust for pension benefits at June 30, 2003. Actual results could differ from those estimates.

### Note 3 — Designations of Net Assets Held in Trust for Pension Benefits

The Systems designate the net assets held in trust for pension benefits for specific purposes:

#### **PSRS**

	<u>2003</u>	<u>2002</u>
<i>Designated for Members' Contributions (Member Reserves) —</i> Accumulation of active and terminated member contributions plus interest.	\$ 4,657,734,877	\$ 4,366,500,583
<i>Designated for the Payment of Benefits to Present Retirees —</i> Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves to fund the Systems' obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	11,386,250,807	10,588,268,955
<i>Designated for Additional Deposit Annuities —</i> Accumulation of the additional deposits over and above the contributions required by law. Defined contribution annuity payments are made to current retirees from this reserve.	1,292,088	1,276,650
<i>Designated for Operating Expenses/Benefits to Future Retirees</i> ( <i>Operating Reserves</i> ) — Accumulation of employer contributions and investment income used to fund future benefit payments, interest on member accounts and administration and maintenance expenses of the System.	4,002,703,765	4,447,430,710
<b>Net Assets Held In Trust For Pension Benefits</b>	<u>\$ 20,047,981,537</u>	<u>\$ 19,403,476,898</u>

#### **NTRS**

	<u>2003</u>	<u>2002</u>
<i>Designated for Members' Contributions (Member Reserves) —</i> Accumulation of active and terminated member contributions plus interest.	\$ 383,179,328	\$ 341,393,112
<i>Designated for the Payment of Benefits to Present Retirees —</i> Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves to fund the Systems' obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	731,059,146	651,294,735
<i>Designated for Operating Expenses/Benefits to Future Retirees</i> ( <i>Operating Reserves</i> ) — Accumulation of employer contributions and investment income used to fund future benefit payments, interest on member accounts and administration and maintenance expenses of the System.	563,531,171	592,329,375
<b>Net Assets Held In Trust For Pension Benefits</b>	<u>\$ 1,677,769,645</u>	<u>\$ 1,585,017,222</u>

## Note 4 – Deposits and Investments

**Deposits**—Cash balances include short-term securities held by the custodial bank to meet future System obligations and operating balances held by the depository banks.

At June 30, 2003, the NTRS carrying amount of deposits at the depository bank was (\$577,789) and the bank balance was \$0. Since the bank balance was \$0, no amount was required to be collateralized. To maximize investment income, the float caused by outstanding checks was invested in overnight repurchase agreements, thus causing the negative book balance. These overnight repurchase agreements are reflected on the Schedule of Investments in Note 4.

At June 30, 2003, the PSRS carrying amount of deposits at the depository bank was \$16,884,157 and the bank balance was \$14,579,337. Of the bank balance, \$100,000 was covered by federal depository insurance. The remaining \$14,479,337 was collateralized with securities held by the pledging financial institution's trust department or agent in the System's name.

The deposits held by the custodial bank are in a pooled short-term investment fund which are not required to be categorized.

The following are the balances of these accounts at June 30:

	<b>2003 Book</b>	<b>2003 Bank</b>	<b>2002 Book</b>	<b>2002 Bank</b>
<b>PSRS</b>				
Depository bank	\$ 16,884,157	\$ 14,579,337	\$ 7,691,766	\$ 8,631,549
Custodial bank	38,109,933	38,109,933	17,050,171	17,050,171
<b>NTRS</b>				
Depository bank	\$ (577,789)	\$ -	\$ (483,854)	\$ -
Custodial bank	23,412,206	23,412,206	15,484,060	15,484,060

**Authorization of Investments**—Funds for both Systems that are in excess of a safe operating balance are invested by the investment agents under policies and procedures established by the Board of Trustees. Chapter 160.040 RSMo as amended effective August 13, 1984, authorizes any investment which a prudent person acting in a like capacity and familiar with similar matters would use in the conduct of an enterprise of a like character and with like aims. Any person with fiduciary responsibility with respect to the Retirement Systems is covered by this “prudent person” rule.

**Categories of Custodial Credit Risk**—The Governmental Accounting Standards Board Statement No. 3 requires disclosure of custodial credit risk. Investments are categorized into three categories of credit risk. Category 1 includes

investments that are insured or registered or for which the securities are held by the Systems' custodial agent in the name of each System. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the name of each System. Category 3 includes uninsured and unregistered investments, which are held by the custodial agent, but not in the Systems' names.

A security for purposes of credit risk disclosure is a transferable financial instrument that evidences ownership or creditorship. “Securities” do not include investments made in open-end pooled funds or securities on loan to broker-dealers under the security lending program. Such investments are shown as “not categorized.”

**PSRS**

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
<b>Category 1 Investments</b>		
Municipals	\$ 18,995,884	\$ 25,823,585
FHA/VA mortgages	4	4
U.S. Government and agencies securities	3,469,437,328	2,971,050,622
Domestic fixed income	1,601,906,662	1,855,212,610
Domestic equities	5,120,315,836	3,842,849,118
International equities	2,283,849,138	1,846,095,450
REITS	8,731,610	7,151,282
<b>Category 2 Investments</b>		
Repurchase agreements	526,665	3,031,159
<b>Investments Not Categorized</b>		
Loaned under the securities lending program		
U.S. Government and agencies securities	1,175,432,075	1,891,637,043
Domestic corporate fixed income securities	64,444,910	108,977,020
Domestic equities	396,286,661	140,314,016
International equities	459,031,133	498,974,486
Pooled funds		
Domestic corporate fixed income securities	3,299,006,678	2,981,877,088
Domestic equities	1,964,540,138	2,609,347,495
International equities	-	429,161,248
Money market fund	1,026,676,673	597,913,307
<b>Total Investments</b>	<u>20,889,181,395</u>	<u>19,809,415,533</u>
Security lending collateral (not categorized)	2,095,194,779	2,639,902,565
<b>Total</b>	<u><u>\$ 22,984,376,174</u></u>	<u><u>\$ 22,449,318,098</u></u>
 <b>Reconciliation to Statement of Plan Net Assets</b>		
Number from above	\$ 22,984,376,174	\$ 22,449,318,098
Less:		
Security lending collateral	(2,095,194,779)	(2,639,902,565)
Repurchase agreements reported as cash	(526,665)	(3,031,159)
Investments per Statement of Plan Net Assets	<u><u>\$ 20,888,654,730</u></u>	<u><u>\$ 19,806,384,374</u></u>

**NTRS**

	<u>June 30, 2003</u>	<u>June 30, 2002</u>
<b>Category 1 Investments</b>		
Municipals	\$ 1,538,048	\$ 1,900,090
U.S. Government and agencies securities	283,769,008	244,178,254
Domestic fixed income	132,363,051	152,669,981
Domestic equities	426,293,352	305,201,010
International equities	195,728,912	151,151,005
REITS	703,864	543,938
<b>Category 2 Investments</b>		
Repurchase agreements	1,736,565	1,772,062
<b>Investments Not Categorized</b>		
Loaned under the securities lending program		
U.S. Government and agencies securities	95,389,446	144,486,109
Domestic fixed income	4,530,475	6,106,250
Domestic equities	26,535,870	19,109,857
International equities	29,728,868	36,551,581
Pooled funds		
Domestic corporate fixed income securities	279,395,050	252,537,135
Domestic equities	160,248,053	211,282,891
International equities	-	33,411,917
Money market fund	75,096,973	45,313,635
<b>Total Investments</b>	<u>1,713,057,535</u>	<u>1,606,215,715</u>
Security lending collateral (not categorized)	156,184,659	206,253,796
<b>Total</b>	<u><u>\$ 1,869,242,194</u></u>	<u><u>\$ 1,812,469,511</u></u>

**Reconciliation to Statement of Plan Net Assets**

Number from above	\$ 1,869,242,194	\$ 1,812,469,511
Less:		
Security lending collateral	(156,184,659)	(206,253,796)
Repurchase agreements reported as cash	(1,736,565)	(1,772,062)
Investments per Statement of Plan Net Assets	<u><u>\$ 1,711,320,970</u></u>	<u><u>\$ 1,604,443,653</u></u>

**Derivatives** — The Systems are parties to certain financial investments with off-balance sheet risk used in the normal course of business to generate earnings and reduce exposure to fluctuations in market conditions. Derivatives are reported at fair value on the Statement of Plan Net Assets.

International security managers are authorized to engage in forward contracts to exchange different currencies at a specified date and rate. These forward contracts involve elements of custodial and market risk in excess of the amount recognized in the Statement of Plan Net Assets. The forward exchange contracts purchased/sold in effect at June 30 are shown below.

<u>2003</u>	<u>Purchase Value</u>	<u>Fair Value</u>
PSRS	\$ 61,969,938	\$ 62,812,527
NTRS	4,982,163	4,972,295
 <u>2002</u>	 <u>Purchase Value</u>	 <u>Fair Value</u>
PSRS	\$ 48,081,909	\$ 46,619,698
NTRS	3,273,569	3,159,186



The “Net Appreciation (Depreciation) in Fair Value of Investments” found on the Statement of Changes in Plan Net Assets includes for PSRS a net loss on forward contracts and currency disposal of \$1,722,322 during 2002-2003 and a net loss of \$3,913,813 during 2001-2002. NTRS had a similar net loss of \$149,542 during 2002-2003 and a net loss of \$340,839 in 2001-2002.

Certain managers are authorized to enter into contractual commitments involving other financial instruments with off-balance-sheet risk. During the year, the systems held Russell 2000 futures, S&P 500 futures, and Treasury futures. These are used to minimize the expenses and volatility of the portfolio.

In addition to the currency forwards listed above, the following derivatives were held by the Systems at June 30, 2003:

Type	PSRS Notional Value	NTRS Notional Value
S&P 500 Futures	\$ 29,365,146	\$ 2,409,351
Russell 2000 Futures	15,859,933	1,149,412
Treasury Futures	423,867,831	37,922,040
Total	<u>\$ 469,092,910</u>	<u>\$ 41,480,803</u>

The Systems’ exposure to derivatives as a percent of total investments does not differ substantially from June 30, 2002.

**Security Lending Activity** – Under the “prudent person” authority of the governing statutes and in accordance with the policies set by the Board of Trustees, the Systems lend securities to broker-dealers and banks pursuant to a form of loan agreement. The Systems’ custodial bank is authorized to lend available securities to approved broker-dealers and banks subject to the receipt of acceptable collateral.

During the fiscal year, the Systems lent securities and received cash (both U.S. and foreign currency), securities issued or guaranteed by the U.S. government or its agencies, sovereign debt of foreign countries, and irrevocable bank letters of credit as collateral. The Systems did not have the ability to pledge or sell noncash collateral absent borrower default. Borrowers were required to deliver collateral for each loan equal to: (1) in the case of loaned securities denominated in U.S. dollars or whose primary trading market was located in the United States, or sovereign debt issued by foreign governments, 102% of the fair value of the loaned securities; and (2) in the case of loaned securities not denominated in U.S. dollars or whose primary trading market was not located in the United States, 105% of the fair value of the loaned securities.

The Systems did not impose any restrictions during the fiscal year on the amount of the loans that the custodial bank made on their behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the year. There were no losses during the year resulting from a default of the borrowers or the custodial bank.

The Systems and borrowers each maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested; together with the cash collateral of other qualified tax-exempt plan lenders in a collective investment pool. The average duration of such investment pool as of June 30, 2003 was 64 days and an average weighted maturity of 405 days. Because the loans were terminable at will, their duration did not match the duration of the investments made with cash collateral. On June 30, 2003 the Systems had no credit risk exposure to borrowers because the amounts the Systems owed the borrowers exceeded the amounts the borrowers owed the Systems.

The collateral held (including both cash collateral recognized in the “Statement of Plan Net Assets” and non-cash collateral) and the fair values of securities on loan for PSRS were \$2,363,532,666 and \$2,270,277,863 for June 30, 2003 and \$2,794,103,529 and \$2,730,606,557 for June 30, 2002. Net security lending income was \$12,129,376 for the 2002-2003 fiscal year and \$18,054,982 for the 2001-2002 fiscal year.

The collateral held (including both cash collateral recognized in the “Statement of Plan Net Assets” and non-cash collateral) and the fair values of securities on loan for NTRS were \$183,147,489 and \$174,836,594 for June 30, 2003 and \$218,847,435 and \$214,114,461 for June 30, 2002. Net security lending income was \$988,933 for the 2002-2003 fiscal year and \$1,402,110 for the 2001-2002 fiscal year.

The collective investment pool in which the collateral received from security lending loans is invested has the following characteristics. The fair value of the investments held by the pooled fund is based upon valuations provided by a recognized pricing service. Because the pooled fund does not meet the requirements of Rule 2a-7 of the Investment Company Act of 1940, the fund’s investments are valued at fair market value for reporting purposes. The pooled fund is not registered with the Securities and Exchange Commission.

The custodial bank and, consequently, the investment vehicles it sponsors (including the pooled fund) are subject to the oversight of the Federal Reserve Board and the Massachusetts Commissioner of Banks. The fair value of the Systems’ position in the pooled fund is not the same as the

value of the fund shares. The Systems had no involuntary participation in an external investment pool through this fund and no income from one fund was assigned to another fund by the custodial bank during either fiscal year.

### Note 5 – Additional Deposits Program

Section 169.035, RSMo provides for an additional deposits program for PSRS members. Members may make payments above the required defined benefit contribution amount to the System in order to provide a monthly annuity at retirement based on the total of the deposits and interest.

This annuity is in addition to the defined benefit allowance provided by the System. Contributions to the program are tax-sheltered. As of September 1, 1996 new deposits to the program were limited to members currently with deposits in the program. No additional deposits were made during 2002-2003. The deposits and interest of the two members who have not yet retired totaled \$1,382 as of June 30, 2003.

The deposits to the program are included in the investment program of the PSRS defined benefit plan. The additional deposits program's basis of accounting and the asset valuation are identical to the defined benefit plan.

### Note 6 – Retirement Plans

#### Section 401 (a) Defined Benefit Plan

All full-time System employees holding a valid Missouri teaching certificate are covered by PSRS. All other eligible employees are members of NTRS. Both Systems provide retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Chapter 169 RSMo contains the statutory provisions of both Systems.

PSRS members were required to contribute 10.5% of their annual covered salary during both years. PSRS, as the employer, was required to match that amount. The contribution rate is established and may be amended by the Board of Trustees. Employer contributions to PSRS totaled \$28,618 for the 2002-2003 fiscal year and \$30,121 for 2001-2002. The amounts for these years are equal to the required contributions.

NTRS members were required to contribute 5% of their annual covered salary during both years. PSRS, as the employer, was required to match that amount. The contribution rate is established and may be amended by the Board of Trustees. Employer contributions to NTRS totaled \$195,887 for the 2002-2003 fiscal year and \$174,859 for 2001-2002. The amounts for these years are equal to the required contributions.

#### Section 457 Deferred Compensation Plan

A voluntary Section 457 deferred compensation plan is

administered to provide additional retirement benefits for employees. The plan provides for employer-matching contributions up to a set maximum. The total contributions are subject to the limitations established in IRC Section 457. The Board of Trustees has authority to establish the employer contribution levels. For employees that are members of PSRS, the System will match up to \$50 per month. For employees that are members of NTRS, the System will match \$50 plus 0.52% of salary per month. For certain employees, the System will make employer-paid contributions of \$1,000 per month. This is governed by individual employment contracts as approved by the Board of Trustees.

All employees immediately vest in the employer-matching and employer-paid contributions. Employer-matching contributions totaled \$57,722 for the 2002-2003 fiscal year and \$54,424 for the 2001-2002 fiscal year. Employer-paid contributions totaled \$17,250 for the 2002-2003 fiscal year and \$10,500 for the 2001-2002 fiscal year. Employee contributions totaled \$131,077 for the 2002-2003 fiscal year and \$139,617 for the 2001-2002 fiscal year.

Maintenance of individual member accounts and custody of assets have been contracted to a third party administrator and investment custodian. Total contributions are sent directly to the third party administrator by the employer. Employees can self-direct investments of their contributions and their respective share of matching contributions in a number of investment options. Because the System does not hold the plan's assets and does not have significant administrative responsibilities, the plan's assets and changes in net assets are not reported in the Systems' financial statements.

### Note 7 — Risk Management

The Systems are exposed to various risks of loss related to natural disasters, errors and omissions, loss of assets, torts, etc. The Systems have chosen to cover such losses through the purchase of commercial insurance. There have been no material insurance claims filed or paid during the past three years.

The Systems have a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal operations.

### Note 8 – Commitments and Contingencies

PSRS was committed to the future purchase of investments at a cost of \$2,145,805,458 on June 30, 2003 and to the future purchase of \$1,069,508,913 in investments on June 30, 2002. NTRS had investment commitments of \$163,224,108 on June 30, 2003 and \$86,757,917 on June 30, 2002.

Certain legal proceedings are pending against PSRS and NTRS arising from normal activities. Although unable to predict the outcome of these matters, the Systems believe the final outcome of these actions will not have a material adverse effect on the Systems' financial statements.



## Schedules of Funding Progress

### Required Supplementary Information

#### Public School Retirement System

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)— Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
6/30/1998	\$ 14,979,358	\$ 14,471,049 <sup>1</sup>	\$ (508,309)	103.5%	\$ 2,577,594	(19.7)%
6/30/1999	17,209,870	16,373,144 <sup>2</sup>	(836,726)	105.1	2,690,007	(31.1)
6/30/2000	19,437,223	18,279,113 <sup>3</sup>	(1,158,110)	106.3	2,836,062	(40.8)
6/30/2001	21,146,294	21,282,203 <sup>4</sup>	135,909	99.4	2,982,051	4.6
6/30/2002	22,236,105	23,333,937 <sup>5</sup>	1,097,832	95.3	3,213,461	34.2
6/30/2003	20,047,982	24,719,450 <sup>6</sup>	4,671,468	81.1	3,373,058	138.5

<sup>1</sup> Legislative improvements to the benefit formula and ad hoc benefit increases for retirees added \$1.1 billion to the AAL.

<sup>2</sup> Legislative improvements to age of eligibility ("Rule of 80") and ad hoc benefit increases for retirees added \$982.5 million to the AAL.

<sup>3</sup> Legislative improvement to the benefit formula and ad hoc benefit increases for retirees added \$643 million to the AAL.

<sup>4</sup> Legislative improvements to the benefit formula and ad hoc benefit increases for retirees added \$630.3 million to the AAL.

Actuarial assumptions were also revised.

<sup>5</sup> There were no legislative changes in fiscal year 2002.

<sup>6</sup> The extension of the 25-and-Out provision to 2008 is included in the AAL for 2003.

#### Non-Teacher School Employee Retirement System

(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)— Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
6/30/1998	\$ 1,150,311	\$ 1,036,347 <sup>1</sup>	\$ (113,964)	111.0%	\$ 616,303	(18.5)%
6/30/1999	1,335,308	1,168,511 <sup>2</sup>	(166,797)	114.3	685,272	(24.3)
6/30/2000	1,522,660	1,395,300 <sup>3</sup>	(127,360)	109.1	735,400	(17.3)
6/30/2001	1,686,242	1,636,076 <sup>4</sup>	(50,166)	103.1	814,158	(6.2)
6/30/2002	1,810,619	1,855,982 <sup>5</sup>	45,363	97.6	895,420	5.1
6/30/2003	1,677,770	2,049,716 <sup>6</sup>	371,946	81.9	971,177	38.3

<sup>1</sup> Legislative improvements to the lifetime COLA limit, 25-and-Out benefit eligibility window, and an ad hoc benefit increase for retirees added \$13.7 million to the AAL.

<sup>2</sup> Legislative improvements to age of eligibility and benefit formula plus ad hoc benefit increases for retirees added \$80.3 million to the AAL.

<sup>3</sup> Legislative improvements to the benefit formula and ad hoc benefit increases for retirees added \$121.7 million to the AAL.

<sup>4</sup> Legislative improvements to the benefit formula and ad hoc benefit increases for retirees added \$126.4 million to the AAL.

Actuarial assumptions were also revised.

<sup>5</sup> There were no legislative changes in fiscal year 2002.

<sup>6</sup> The extension of the 25-and-Out provision to 2008 is included in the AAL for 2003.

## Schedules of Employer Contributions

### Required Supplementary Information

#### *Public School Retirement System*

<u>Year Ended June 30</u>	<u>Annual Required Contribution (ARC)</u>	<u>Percentage Contributed</u>
1998	\$ 273,125,719	100%
1999	287,698,736	100
2000	304,944,352	100
2001	324,525,673	100
2002	340,000,556	100
2003	355,979,027	94.5

#### *Non-Teacher School Employee Retirement System*

<u>Year Ended June 30</u>	<u>Annual Required Contribution (ARC)</u>	<u>Percentage Contributed</u>
1998	\$ 27,315,729	100%
1999	30,012,859	100
2000	34,185,605	100
2001	37,500,243	100
2002	45,773,119	100
2003	48,933,326	92.6

#### **Notes to the Schedules of Trend Information**

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	June 30, 2003
Actuarial cost method	Entry Age Normal
Amortization method/approach	Level Percent, Open
Remaining amortization period	
PSRS	30 years (1)
NTRS	30 years (2)
Asset valuation method	5-year smoothed market
	Marked to Market as of 6/30/2003
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases*	
PSRS	5.0 - 10.0%
NTRS	5.0 - 10.0%
*Includes inflation at	3.5%
Cost-of-living adjustments	3.5%

- 1) 30 year amortization assumes an ARC rate of 27.75% for fiscal year 2004. The annual statutory increase in the total contribution rate may not exceed 1% of pay. Contribution rates will be established by actuarial valuation.
- 2) 30 year amortization assumes an ARC rate of 12.47% for fiscal year 2004. The annual statutory increase in the total contribution rate may not exceed .5% of pay. Contribution rates will be established by actuarial valuation.

## Schedule of Administrative Expenses

For the year ended June 30, 2003

	<u>PSRS</u>	<u>NTRS</u>	<u>TOTAL</u>
<b>Personal services</b>	\$ 2,586,482	\$ 1,893,799	\$ 4,480,281
<b>Professional services</b>			
Actuarial	75,415	45,532	120,947
Audit	21,720	14,480	36,200
Computer consultants	22,084	14,723	36,807
Insurance consultant	3,600	2,400	6,000
Legislative consultant	19,200	12,800	32,000
Other consultants	44,100	29,400	73,500
Legal expenses	90,368	31,369	121,737
Total professional services	<u>276,487</u>	<u>150,704</u>	<u>427,191</u>
<b>Communications</b>			
Information and publicity	316,984	218,976	535,960
Postage	77,756	64,628	142,384
Printing	50,132	29,481	79,613
Staff field	23,676	9,492	33,168
Telephone	60,894	40,597	101,491
Total communications	<u>529,442</u>	<u>363,174</u>	<u>892,616</u>
<b>Miscellaneous</b>			
Building and utilities	77,606	51,734	129,340
Board of trustees	43,155	28,528	71,683
Insurance	60,107	40,071	100,178
Office	150,290	100,194	250,484
Staff development	84,014	56,110	140,124
Miscellaneous	87,849	19,250	107,099
Total miscellaneous	<u>503,021</u>	<u>295,887</u>	<u>798,908</u>
<b>Charge for use of fixed assets</b>	-	240,353	240,353
<b>Depreciation expense</b>	<u>778,742</u>	<u>1,930</u>	<u>780,672</u>
<b>Total administrative expenses</b>	<u>\$ 4,674,174</u>	<u>\$ 2,945,847</u>	<u>\$ 7,620,021</u>

See accompanying Independent Auditors' Report.

## Schedule of Investment Expenses

For the year ended June 30, 2003

	<u>PSRS</u>	<u>NTRS</u>	<u>TOTAL</u>
Investment management expenses			
U.S. equity	\$ 12,000,506	\$ 927,622	\$ 12,928,128
International equity	7,736,423	589,696	8,326,119
U.S. fixed income	4,061,018	312,235	4,373,253
Private equity	249,663	18,792	268,455
Total investment management expenses	<u>24,047,610</u>	<u>1,848,345</u>	<u>25,895,955</u>
Investment consultant fees	339,073	25,478	364,551
Custodial bank fees	1,557,314	121,441	1,678,755
Investment staff expenses	345,198	230,349	575,547
Total investment income expenses	<u>\$ 26,289,195</u>	<u>\$ 2,225,613</u>	<u>\$ 28,514,808</u>
Security lending expenses			
Agent fees	\$ 3,227,248	\$ 261,289	\$ 3,488,537
Broker rebates	32,292,969	2,664,266	34,957,235
Total security lending expenses	<u>\$ 35,520,217</u>	<u>\$ 2,925,555</u>	<u>\$ 38,445,772</u>

## Schedule of Professional/Consultant Fees

For the year ended June 30, 2003

	<u>PSRS</u>	<u>NTRS</u>	<u>TOTAL</u>
Actuarial services	\$ 75,415	\$ 45,532	\$ 120,947
Legal counsel	90,368	31,369	121,737
Financial audit	21,720	14,480	36,200
Legislative consulting	19,200	12,800	32,000
Technology consulting	22,084	14,723	36,807
Insurance consulting	3,600	2,400	6,000
Other consulting	44,100	29,400	73,500
Total fees	<u>\$ 276,487</u>	<u>\$ 150,704</u>	<u>\$ 427,191</u>



**Letter from Strategic Investment Solutions, Inc.**

**Letter from the Chief Investment Officer**

**Investment Highlights**

**PSRS/NTRS Asset Allocation**

**Total Fund Review**

**Asset Class Reviews**

**Broker Commissions Reports**

**Investment Summary and Expenses**

## **INVESTMENT SECTION**

## STRATEGIC INVESTMENT SOLUTIONS, INC.

333 BUSH STREET, STE. 2000  
SAN FRANCISCO, CALIFORNIA 94104

MICHAEL R. BEASLEY  
MANAGING DIRECTOR

TEL 415/362-3484  
FAX 415/362-2752

September 23, 2003

To the Members of the Board:

Fiscal Year 2003 was another year of very unsettled global financial markets. Slow economic growth, war anxieties, threats of terrorism, continued discoveries of corporate scandals, and volatile levels of consumer confidence defined the general market environment during the fiscal year.


The Total Fund returns for the fiscal year ended June 30, 2003 were 4.8% and 4.7% respectively for PSRS and NTRS. Both funds slightly trailed the policy index return of 5.3%. All performance results were calculated in compliance with the AIMR Performance Presentation Standards.

Asset class performance was mixed. Two of the four fiscal quarters were positive for U.S. equities. The broad U.S. market represented by the Russell 3000 Index was up 16.3% for the fourth quarter but just 1% for the fiscal year. Non-U.S. equities based upon the MSCI ACWI ex-U.S. Index were up 19.8% for the fourth quarter, but finished the fiscal year at -4.2%. The U.S. bond market benefited from lower inflation, its status as a safe haven from the equity market, and aggressive reductions of short-term rates by the Federal Reserve. The Lehman Aggregate Index was up 10.4% for the fiscal year.

The Board decisions made last fiscal year to enhance the return potential and diversification of the System's investment portfolios were implemented during this fiscal year. A 5% allocation to U.S. Government-issued Treasury Inflation Protected Securities returned 13.4% for the trailing 12 months. Contract negotiations with a private equity manager to invest a portion of the 3% target allocation in corporate buyouts, venture capital and private debt were completed.

Thank you for the opportunity to participate in this partnership with you.

Sincerely,



Michael R. Beasley

Managing Director





October 1, 2003

To the Members of the Systems:

On behalf of the PSRS and NTRS internal investment staff, I am pleased to present the following reports on the Systems' investments for the fiscal year ending June 30, 2003. The combined Retirement Systems ended the year as one of the 50 largest defined benefit plans in the United States with total assets of \$21.6 billion.

PSRS and NTRS achieved a positive investment return in fiscal year 2003 following two consecutive years of negative returns. The Systems' assets increased over \$730 million in fiscal year 2003 with an investment return of 4.8% and 4.7% respectively for PSRS and NTRS. However, as discussed in prior letters to the membership, the Systems' basic investment objective is to achieve a total return that exceeds the actuarial assumption of 8% over long time periods. Thus, despite the positive return in 2003, PSRS and NTRS fell short of the 8% return target. Over longer time periods (10 years) the Systems' annual investment return remains above the 8% objective.

### *Historical Investment Review*

The long-term investment objective of the Board of Trustees has been to focus on the ability of the Systems to adequately fund a stream of liabilities (i.e., your pension benefits) with the highest probability and within acceptable risk parameters. Accordingly, the investment objective has not been to 'beat' the market or to have the top-ranked investment fund in the country (although both would be positive ancillary benefits to the primary investment objective). As a result, the asset allocation of PSRS and NTRS does not always mirror the asset allocation of other public funds or large institutional investors. For example, the Systems continue to have more assets invested in fixed income securities than almost 90% of large public funds. This conservative allocation came under pressure during the bull market of the 1990s, but provided welcomed downside protection in the bear market of the last three years. The point of emphasis however, is that the asset allocation is specific to PSRS and NTRS because it was developed to fund your benefits over a very long-term horizon.

The table below provides a year-by-year review of the investment performance of the Systems, including a comparison with the return of the median public fund and of the S&P 500 Index for the last seven fiscal years.

	2003	2002	2001	2000	1999	1998	1997
PSRS Return	4.8%	-2.8%	-1.9%	7.7%	10.4%	17.8%	19.6%
Rank <sup>1</sup>	25 <sup>th</sup>	15 <sup>th</sup>	13 <sup>th</sup>	81 <sup>st</sup>	75 <sup>th</sup>	53 <sup>rd</sup>	52 <sup>nd</sup>
Median Fund <sup>2</sup>	4.0%	-5.8%	-6.1%	10.3%	11.7%	18.0%	19.8%
S&P 500 Index	0.2%	-18.0%	-14.8%	7.3%	22.7%	30.2%	34.7%

As the table illustrates, the Systems' returns have been far better than the median public fund over the last three years (bear market) while the Systems' returns lagged the median public fund in the late 1990s (bull market). Historically, the Systems' returns have trailed the market (and other public funds) on the upside while providing downside protection in negative markets. Over the long-term, we believe this strategy provides our Systems with more consistent returns (less return volatility) while accepting far less risk.

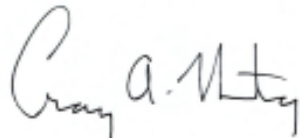
### *Focus on the Future*

As stated above, the Systems maintain a long-term investment concentration. However, the immediate issue (next three to five years) facing all investors is that near-term expectations for both stocks and bonds are well below long-term expectations. Interest rates reached all-time lows in the summer of 2003, and thus we know with mathematical definiteness, that if rates rise in the future, the fixed income returns over the next three years will be lower than the returns experienced over the past three years. Forecasting equity returns is far less reliable. Nonetheless, based on current valuations and historical returns, consensus stock return expectations for the next three to five years are in the mid to high single digits. This is certainly not as bad as the last three years, but nowhere near the stock returns that investors experienced in the late 1990s.

This shift in the market environment has obviously evolved over the last several years. As such, the Board of Trustees, the internal investment staff and the Systems' asset consultant updated the PSRS and NTRS asset allocations to provide diversification into other asset classes. Specifically, allocations to real return assets (such as inflation protected bonds) and private equity have been initiated within the last 18 months. We would expect more changes in the asset allocation in the next 18 months as we adjust to the 'lower return' market environment.

Peter Bernstein stated in his *Economics and Portfolio Strategy*<sup>3</sup> newsletter, "Ignorance of the future over which we have no control explains why risk management must be the dominant tool for success in investing...the long history of the markets demonstrates that the survivors are those who eschew maximization and manage their risks instead." This statement nicely ties together the *Historical Investment Review* and *Focus on the Future* in this annual report letter. The Systems remain long-term investors and the Board and investment staff are fiduciaries of your assets. Thus, as we strive to improve our investment process and investment results, you can be assured that we will remain loyal to the tenants of investing that have been the foundation of PSRS/NTRS for many years. Specifically, we will manage your assets with prudence, in a diversified portfolio and with a significant focus on maximizing *risk-adjusted* returns.

Until next year,



Craig A. Husting, CFA  
Chief Investment Officer

<sup>1</sup> 1<sup>st</sup> = top performing fund and 100<sup>th</sup> = bottom performing fund.

<sup>2</sup> The TUCS median fund return reflects a universe of public pension plans with assets in excess of \$1 billion.

<sup>3</sup> August 1, 2003

## Investment Highlights

As of June 30, 2003

The Board of Trustees of the Public School and the Non-Teacher School Employee Retirement Systems of Missouri (PSRS/NTRS) is charged with the responsibility for investing the assets of the Systems in a manner consistent with the fiduciary standards set forth in the 'prudent person' rule. To that end, the Board has adopted the following principles to guide all investment-related decisions:

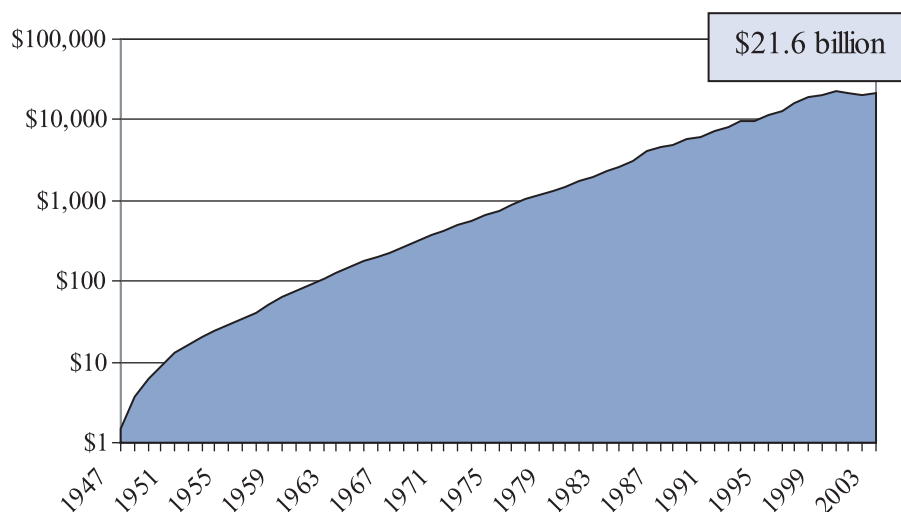
- (1) Act in the exclusive interest of the members of the Systems,
- (2) Maximize total return within prudent risk parameters
- (3) Preserve the long-term purchasing power of the fund.

The investment portfolios of PSRS/NTRS represent all contributions to the plans, from members and their employers, as well as all net earnings on these assets. These funds are held in support of both current and future liabilities.

Total assets grew to \$21.6 billion as of June 30, 2003 from \$20.9 billion at the beginning of the fiscal year, increasing by approximately \$0.7 billion. This growth resulted primarily from exceptional fixed income performance. The long-term growth in assets since the inception of PSRS in 1946 and NTRS in 1965 is shown in the graph below.

### 56 Years of Growth

(dollar amounts in millions)



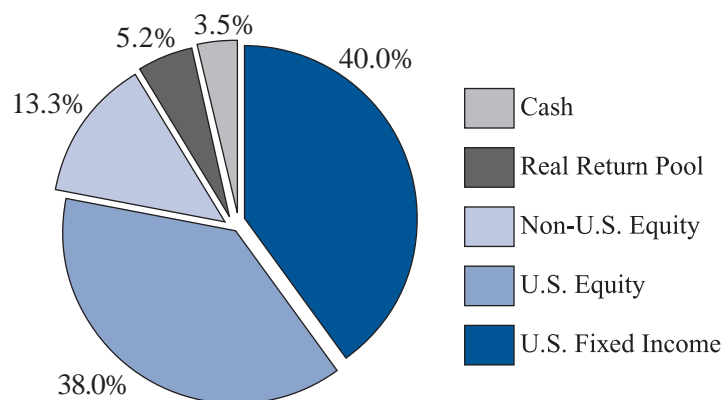
## PSRS/NTRS Asset Allocation

As of June 30, 2003

The time horizon of the Systems' investment portfolio reflects the long-term nature of the PSRS/NTRS pension obligations. Accordingly, diversification among investments displaying unique risk and return characteristics provides the framework for selecting an asset allocation that is expected, in the aggregate, to give the funds the highest long-term return within a prudent risk level.

The Systems' investment portfolio includes strategic, long-term commitments in the following asset classes: U.S. Equities, Non-U.S. Equities, U.S. Fixed Income, Real Return Assets and Private Equity. The Board approved a 3% allocation to Private Equity in January 2002, but initial funding of the new asset class did not begin until July 2003. As the Private Equity allocation is funded, the new target allocation for U.S. Fixed Income will drop to 40% and the target allocation for U.S. equity will drop to 37%. The Systems' asset allocation is reviewed in conjunction with plan liabilities at least every three years.

### Asset Allocation 6/30/03



Asset Type	PSRS Market Value	NTRS Market Value	Combined Funds	% of Total	Target Allocation
U.S. fixed income	\$ 7,964,134,249	\$ 664,406,146	\$ 8,628,540,395	40.0%	42.0 %
U.S. equity	7,583,267,738	621,915,238	8,205,182,976	38.0	38.0
Non-U.S. equity	2,659,261,467	218,208,072	2,877,469,539	13.3	15.0
Real return pool	1,039,944,601	90,076,250	1,130,020,851	5.2	5.0
Cash & equivalents*	671,547,786	72,894,824	744,442,610	3.5	0.0
Total investments**	\$ 19,918,155,841	\$ 1,667,500,530	\$ 21,585,656,371	100.0%	100.0 %

\*All manager-held cash is reflected as Cash & equivalents.

\*\* Total investments include accrued income and exclude securities lending collateral as of June 30, 2003.

## Total Fund Review

Periods Ended June 30, 2003

### Total Fund Investment Returns\*

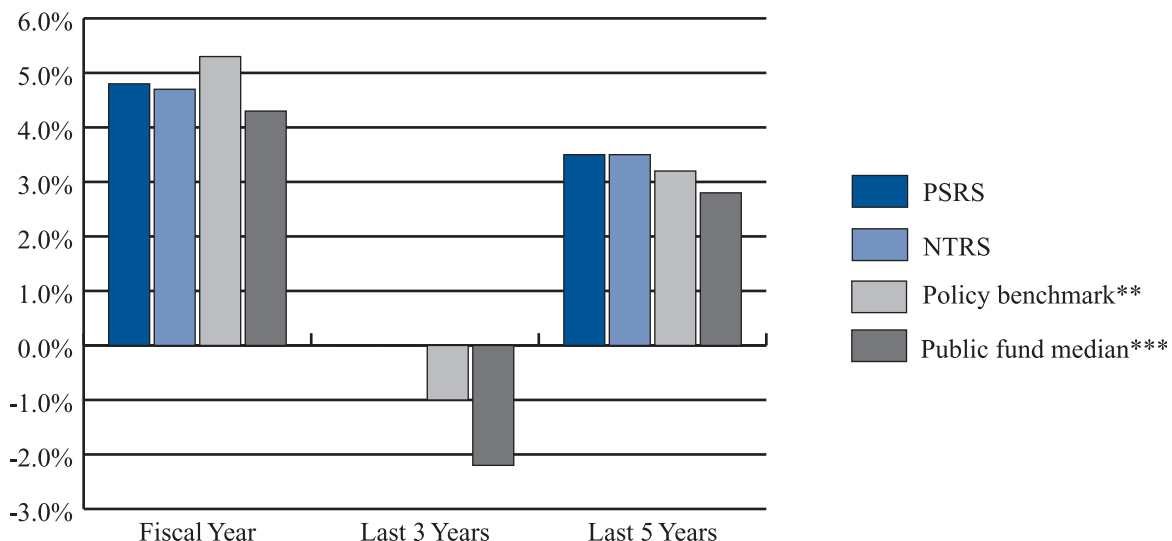
The Board has established a long-term goal to achieve a total investment return of at least 8.0% per year and a real rate of return of at least 4.5% per year. The real rate of return is the rate by which the long-term total return exceeds the inflation rate.

The one-year total returns of 4.8% for PSRS and 4.7% for NTRS were below the long-term investment objective of 8.0% due to a difficult equity market environment in fiscal

year 2003. In addition, the annualized investment returns for the last three- and five-year periods for both PSRS and NTRS have been less than the 8.0% nominal return and the 4.5% real rate of return objectives. This is, again, due to the negative trend experienced by equity markets on a global basis since March 2000. However, as the chart below indicates, the Systems' one-, three- and five-year returns outperformed the median public retirement system.

### Total Fund Investment Returns 6/30/03

	Fiscal Year	Last 3 Years	Last 5 Years
PSRS	4.8 %	0.0 %	3.5 %
NTRS	4.7	0.0	3.5
Policy benchmark **	5.3	-1.0	3.2
Public fund median ***	4.3	-2.2	2.8



\*Returns were prepared using a time-weighted return in accordance with the Association for Investment Management and Research (AIMR) Performance Presentation Standards.

\*\* The policy benchmark is comprised of 42% Lehman Aggregate Index, 38% Russell 3000 Index, 15% MSCI All Country World ex-U.S. Free Index, and 5% Lehman U.S. TIPS Index.

\*\*\* The Independent Consultants Cooperative (ICC) median fund return reflects a universe of public pension plans with assets in excess of \$1 billion.

## Fixed Income Review

As of June 30, 2003

### Market Value

As of June 30, 2003, the combined PSRS/NTRS fixed income assets managed by external investment advisors had a market value of approximately \$9.1 billion, representing 42.1% of total assets.

### Fixed Income Statistics

The following table displays the statistical characteristics of the PSRS/NTRS bond portfolio as of June 30, 2003 with comparisons shown to the portfolio's policy benchmark (Lehman Aggregate Index). Additionally, the top 10 fixed income holdings as of June 30, 2003 are compared to the top 10 holdings of five years ago.

Characteristics	June 30, 2003 Combined Systems	June 30, 2003 Lehman Aggregate Index
Number of securities	9,338	7,472
Average coupon	5.9%	6.1%
Yield to maturity	3.4%	3.4%
Average maturity (years)	6.3	6.2
Duration (years)	4.3	4.2

Top 10 Largest Holdings* June 30, 2003			Top 10 Largest Holdings* June 30, 1998		
	Combined Market Value	% of Total Bonds		Combined Market Value	% of Total Bonds
GNMA I TBA JUN 30, 6.0%, SINGLE FAM \$	178,297,536	2.1%	USTB, 7.5%, 11/15/16	\$ 148,144,000	1.7%
FNMA TBA JUL 30, 5.5%, SINGLE FAM	177,171,364	2.1	USTN, 6.5%, 8/31/01	116,324,132	1.3
FNMA TBA, JUL 15, 5.0%, SINGLE FAM	171,230,138	2.0	USTB, 8.0%, 11/15/21	114,552,317	1.3
FNMA TBA, JUL 30, 6.0%, SINGLE FAM	143,286,719	1.6	USTB, 8.75%, 5/15/17	112,740,665	1.3
FNMA TBA, JUL 30, 6.5%, SINGLE FAM	133,636,422	1.5	USTN, 7.75%, 11/30/99	112,180,471	1.3
USTN, 4.75%, 11/15/08	110,099,617	1.3	FNMA, 5.625%, 3/15/01	97,118,259	1.1
USTN, 3.625%, 5/15/13	107,080,314	1.2	USTB, 6.25%, 8/15/23	95,820,490	1.1
USTB, 8.125%, 8/15/19	103,506,752	1.2	USTN, 6.875%, 3/31/00	89,037,860	1.0
FNMA DISC NOTE, 7/16/03	100,772,791	1.2	USTN, 5.75%, 4/30/03	84,826,560	1.0
USTB, 12.75%, 11/15/10	85,914,789	1.0	USTN, 6.25%, 1/31/02	81,081,785	0.9
Total	\$ 1,310,996,442	15.2%	Total	\$ 1,051,826,539	12.0%

### Key to Holdings

USTN = U.S. Treasury Note  
USTB = U.S. Treasury Bond

GNMA = Government National Mortgage Association  
FNMA = Federal National Mortgage Association

\*Includes only actively managed separate accounts.

A complete list of portfolio holdings is available upon request.

## Fixed Income Review

As of June 30, 2003

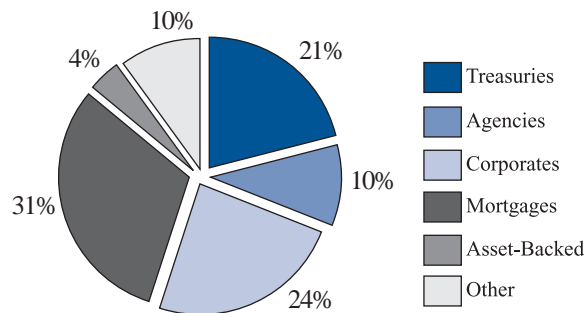
### Fixed Income Structure

As of June 30, 2003, approximately 39.4% of the PSRS/NTRS fixed income portfolio was passively managed by State Street Global Advisors while the remaining 60.6% was actively managed by four separate external managers. The Board broadened the mandates of the active managers in July 2002 to provide the investment managers with more discretion in the management of the assets under an expected volatile fixed income environment. Additionally, the Board approved a small allocation to a dedicated high

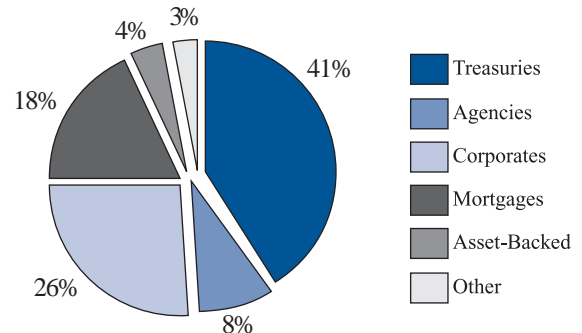
yield bond manager in June 2003. The initial funding of the manager began in July 2003.

The pie charts below depict the fixed income composite by showing the current sector allocation of the portfolio compared with that of five years ago on a market value basis.

**Sector Allocation 6/30/03**



**Sector Allocation 6/30/98**



### Fixed Income Investment Advisors

The following firms were under contract with PSRS/NTRS during fiscal year 2003 for management of fixed income securities.

Investment Advisor	Investment Style	Combined Portfolio Market Value*	% of Total Market Value
BlackRock Financial Management	Active Core	\$ 730,007,701	3.4%
BlackRock Financial Management	Active Mortgages	815,898,563	3.8
NISA Investment Advisors	Active Core	1,286,446,975	6.0
Payden & Rygel	Active Core Plus	1,382,271,219	6.4
State Street Global Advisors	Passive Core	3,578,401,728	16.5
Wellington Management Company	Active Core	1,292,229,347	6.0
Total		\$ 9,085,255,533	42.1%

\*Includes manager cash.

## Fixed Income Review

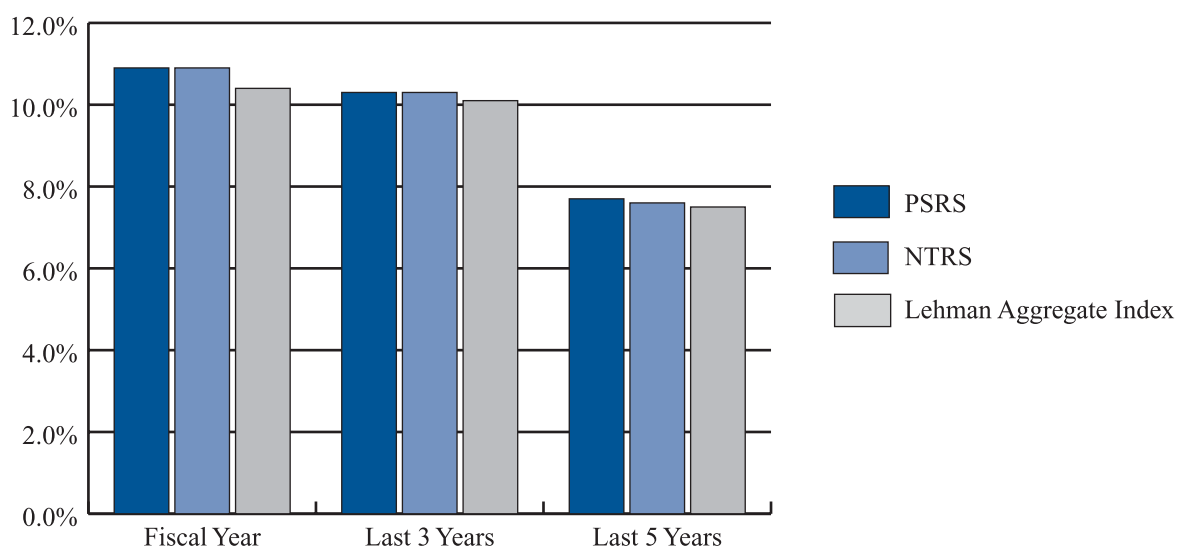
Periods ended June 30, 2003

### Fixed Income Investment Returns

The year ending June 30, 2003 was an excellent year for fixed income assets as interest rates declined significantly. The total return on the PSRS and NTRS bond portfolios for the fiscal year was 10.9%, outperforming the Lehman Aggregate Index by 50 basis points. Over the five-year period ended June 30, 2003, the PSRS and NTRS bond portfolios achieved annual returns of 7.7% and 7.6% respectively. These returns exceeded the benchmark's return by 20 basis points for PSRS and 10 basis points for NTRS.

### Fixed Income Investment Returns 6/30/03

	Fiscal Year	Last 3 Years	Last 5 Years
PSRS	10.9 %	10.3 %	7.7 %
NTRS	10.9	10.3	7.6
Lehman Aggregate Index	10.4	10.1	7.5





## Domestic Equity Review

As of June 30, 2003

### Market Value

As of June 30, 2003, the combined PSRS/NTRS domestic equity assets managed by external investment advisors had a market value of approximately \$8.3 billion, representing 38.3% of total assets.

### Domestic Equity Statistics

The following table displays the statistical characteristics of the PSRS/NTRS domestic equity portfolio as of June 30, 2003 with comparisons shown to the portfolio's policy benchmark (Russell 3000 Index). Additionally, the top 10 U.S. stock holdings as of June 30, 2003 are compared to the top 10 holdings of five years ago.

Characteristics	June 30, 2003 Combined Systems	June 30, 2003 Russell 3000 Index
Number of securities	2,693	2,892
Dividend yield	1.4%	1.7%
Price-to-earnings ratio	23.4	23.9
Avg. market capitalization	\$67.0 bil.	\$71.7 bil.
Price-to-book ratio	4.0	4.0

Top 10 Largest Holdings* June 30, 2003	Combined Market Value	% of Total U.S. Equities	Top 10 Largest Holdings* June 30, 1998	Combined Market Value	% of Total U.S. Equities
Microsoft Corp	\$ 152,879,766	1.9%	Philip Morris Co	\$ 85,050,000	1.2%
Citigroup Inc	152,193,462	1.9	Xerox Corp	77,255,325	1.1
Pfizer Inc	112,057,932	1.3	Kimberly Clark Corp	50,678,113	0.7
General Electric Co	98,604,507	1.2	Sears Roebuck and Co	48,221,056	0.7
Wal-Mart Stores Inc	89,990,153	1.1	Burlington Northern Santa Fe	44,645,856	0.6
Amgen Inc	88,375,232	1.1	BankBoston Corp	38,937,500	0.6
Johnson & Johnson	84,914,148	1.0	Lockheed Martin Corp	38,349,195	0.6
Exxon Mobil Corp	83,965,696	1.0	Chase Manhattan Corp	33,718,300	0.5
Intel Corp	82,658,529	1.0	FirstEnergy Corp	33,507,168	0.5
Dell Computer Corp	78,123,471	1.0	Travelers Group Inc	31,349,188	0.5
Total	\$ 1,023,762,896	12.5%	Total	\$ 481,711,701	7.0%

\*Includes only actively managed separate accounts.

A complete list of portfolio holdings is available upon request.

## Domestic Equity Review

As of June 30, 2003

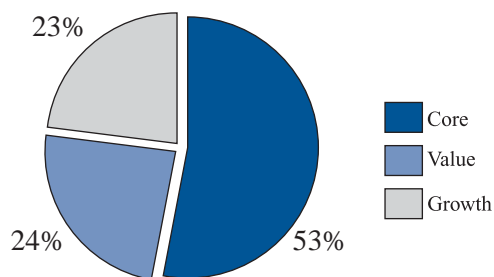
### Domestic Equity Structure

As of June 30, 2003, 30.5% of the PSRS/NTRS domestic equity portfolio was passively managed. Another 18.8% was managed in an enhanced index style, in which the managers' guidelines permitted limited flexibility with the expectation of capturing additional return relative to the benchmark. The remainder of the portfolio was actively managed and diversified across a broad array of capitalization ranges and investment styles. The Board

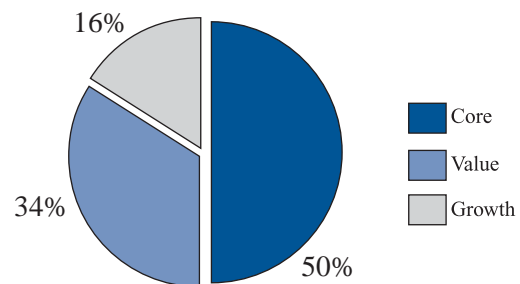
approved increased mandates in large-cap enhanced equity and small-cap growth in fiscal year 2003.

The pie charts below depict the domestic equity portfolio by presenting the current style structure of the portfolio for comparison with that of five years ago on a market value basis.

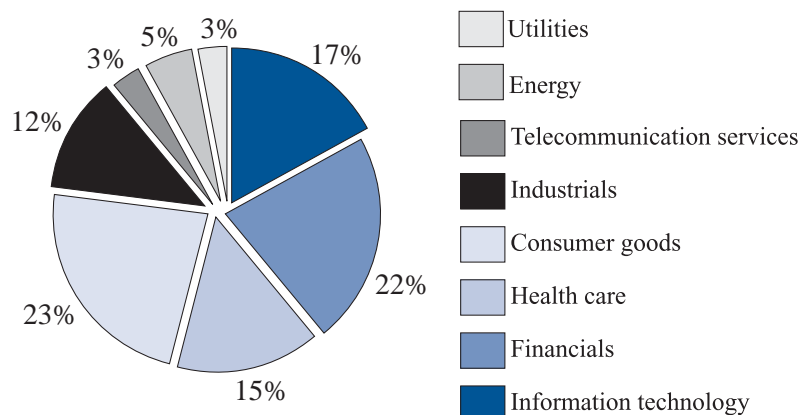
**Asset Mix 6/30/03**



**Asset Mix 6/30/98**



The following pie chart shows the allocation to sectors within the domestic equity market for the PSRS/NTRS portfolio as of June 30, 2003.



# Domestic Equity Review

As of June 30, 2003

## Domestic Equity Investment Advisors

The following firms were under contract with PSRS/NTRS as of June 30, 2003 for management of domestic equity securities.

Investment Advisor	Investment Style	Combined Portfolio Market Value* As of June 30, 2003	% of Total Market Value
Alliance Capital Management	Active Large Cap Growth	\$ 942,776,736	4.4%
Aronson Partners	Active Large Cap Value	671,548,952	3.1
Chartwell Investment Partners	Active Small Cap Growth	116,386,629	0.5
DSI International Management	Enhanced Large Cap Core	799,699,235	3.7
<i>E-MAP: Analytic Investors - Core</i>	Structured Large Cap Core	94,632,323	0.4
<i>E-MAP: Analytic Investors - Value</i>	Structured Large Cap Value	52,098,067	0.3
<i>E-MAP: Legg Mason Capital Management</i>	Active Large Cap Core	136,484,495	0.6
<i>E-MAP: New Amsterdam Partners</i>	Active Large Cap Core	80,015,063	0.4
<i>E-MAP: Next Century Growth Investors</i>	Active Small Cap Growth	71,475,686	0.3
<i>E-MAP: Systematic Financial Management</i>	Active Small Cap Value	59,472,073	0.3
<i>E-MAP: Westwood Management</i>	Active Large Cap Value	125,464,989	0.6
<i>E-MAP: Zevenbergen Capital</i>	Active All Cap Growth	111,709,905	0.5
<i>Equity Manager Alpha Pool Subtotal</i>		731,352,601	3.4
State Street Global Advisors - Enhanced Index	Enhanced Large Cap Core	757,112,819	3.5
State Street Global Advisors - Russell 2000 Index Fund	Passive Russell 2000 Index	399,280,390	1.8
State Street Global Advisors - S&P 500 Index Fund	Passive S&P 500 Index	2,124,788,191	9.9
TCW Asset Management Company	Active Large Cap Growth	661,295,417	3.1
Thomson, Horstmann & Bryant, Inc.	Active Small Cap Value	262,918,089	1.2
UBS Brinson	Active Large Cap Value	805,909,154	3.7
Total		\$ 8,273,068,213	38.3%

\*Includes manager cash.

## Domestic Equity Review

Periods ended June 30, 2003

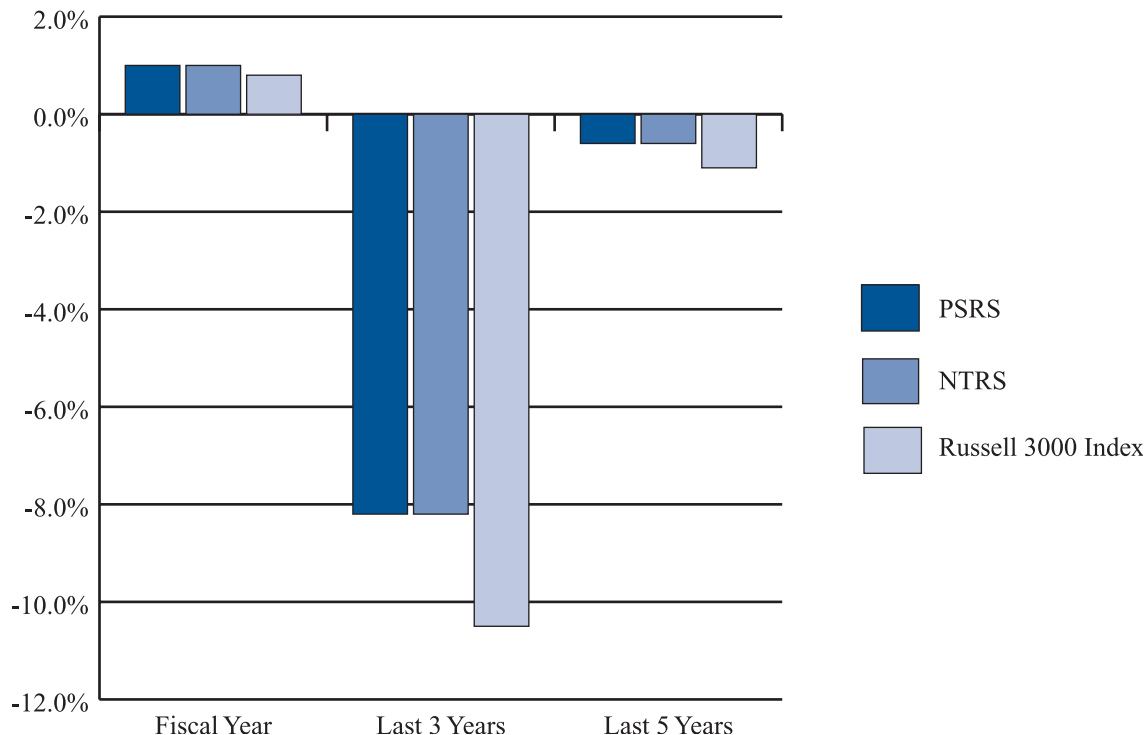
### Domestic Equity Investment Returns

The U.S. equity markets finished the fiscal year in positive territory following two (double digit) negative return years. The total return on the PSRS and NTRS domestic equity portfolios was 1.0% compared to the benchmark return of 0.8% for the fiscal year ended June 30, 2003.

The Systems' annualized returns for the past 3- and 5-year time periods were negative but exceeded the benchmark return by 230 basis points and 50 basis points respectively. This outperformance can primarily be attributed to the value added by the Systems' active management strategies. Portfolios concentrated in large capitalization stocks tended to outperform portfolios holding smaller capitalization stocks in fiscal year 2003 while growth oriented portfolios outperformed value style funds during the year.

### Domestic Equity Investment Returns 6/30/03

	Fiscal Year	Last 3 Years	Last 5 Years
PSRS	1.0%	-8.2%	-0.6%
NTRS	1.0	-8.2	-0.6
Russell 3000 Index	0.8	-10.5	-1.1



## Non-U.S. Equity Review

As of June 30, 2003

### Market Value

As of June 30, 2003, the combined PSRS/NTRS non-U.S. equity assets managed by external investment advisors had a market value of approximately \$3 billion, representing 13.7% of total assets.

### Non-U.S. Equity Statistics

The following table displays the top 10 non-U.S. stock holdings as of June 30, 2003 as compared to the top 10 holdings of five years ago.

Top 10 Largest Holdings* June 30, 2003	Combined Market Value	% of Total Non-U.S. Equities	Top 10 Largest Holdings* June 30, 1998	Combined Market Value	% of Total Non-U.S. Equities
Canon Inc	\$ 72,870,123	2.5%	Mannesmann AG	\$ 57,796,806	2.1%
HSBC Holdings	65,462,641	2.3	ING Groep NV	52,553,583	2.0
Novartis AG	62,612,065	2.2	Novartis AG	48,063,449	1.8
Nestle SA	59,846,902	2.1	Vodaphone Group	47,677,005	1.8
ENI	55,856,868	1.9	Glaxo Wellcome	47,400,332	1.8
Vodaphone Group	53,374,789	1.9	Nestle SA	45,047,310	1.7
Total SA	50,774,994	1.8	Telecom Italia SPA	40,198,511	1.5
ING Groep NV	45,589,147	1.6	BAT Industries	37,815,894	1.4
Diageo	44,062,474	1.5	Diageo	36,867,104	1.3
Royal Bk Scot Group	41,551,993	1.4	Sony Corp	35,776,377	1.3
Total	\$ 552,001,996	19.2%	Total	\$ 449,196,371	16.7%

\*Includes only actively managed separate accounts.

A complete list of portfolio holdings is available upon request.

## Non-U.S. Equity Review

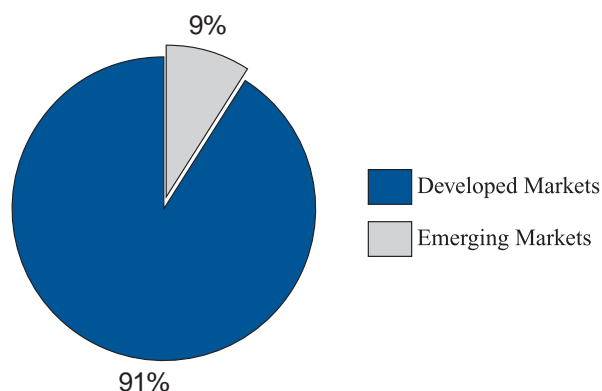
As of June 30, 2003

### Non-U.S. Equity Structure

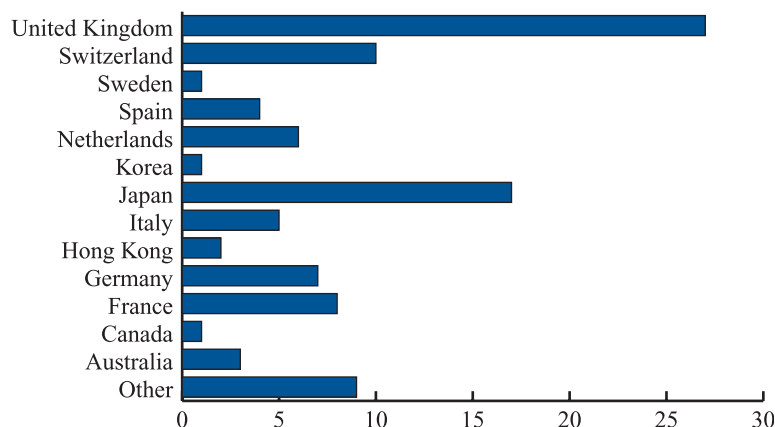
As of June 30, 2003, four separate external managers actively managed 100% of the PSRS/NTRS non-U.S. equity portfolios. The assets were diversified across capitalization ranges, styles and a number of developed and emerging market countries. The Systems employ a fully active management style in the non-U.S. equity portfolios because international markets are generally considered to be less efficient. Therefore, PSRS and NTRS expect the benefits of active management (over time) to be greater in the international markets than in the more efficient domestic markets.

Non-U.S. stocks are also attractive for the diversification benefits they provide to a portfolio. PSRS and NTRS expect similar returns in both U.S. and non-U.S. stock markets over time. However, the combination of the stocks is expected to result in lower total portfolio volatility. The pie chart below presents a breakdown of investments in developed and emerging markets in the non-U.S. equity portfolio and the bar graph depicts the specific country exposure.

**Market Allocation 6/30/03**



**Country Allocation 6/30/03**



### Non-U.S. Equity Investment Advisors

The following firms were under contract with PSRS/NTRS as of June 30, 2003 for management of non-U.S. equity securities.

Investment Advisor	Investment Style	Combined Portfolio Market Value* As of June 30, 2003	% of Total Market Value
Bank of Ireland Asset Management	Active Core	\$ 802,189,560	3.7%
BPI Global Asset Management	Active Core	636,553,890	3.0
INVESCO Global Asset Management	Active Value	868,475,805	4.0
Oechsle International Advisors	Active Growth	657,532,234	3.0
Total		\$ 2,964,751,489	13.7%

\*Includes manager cash.

## Non-U.S. Equity Review

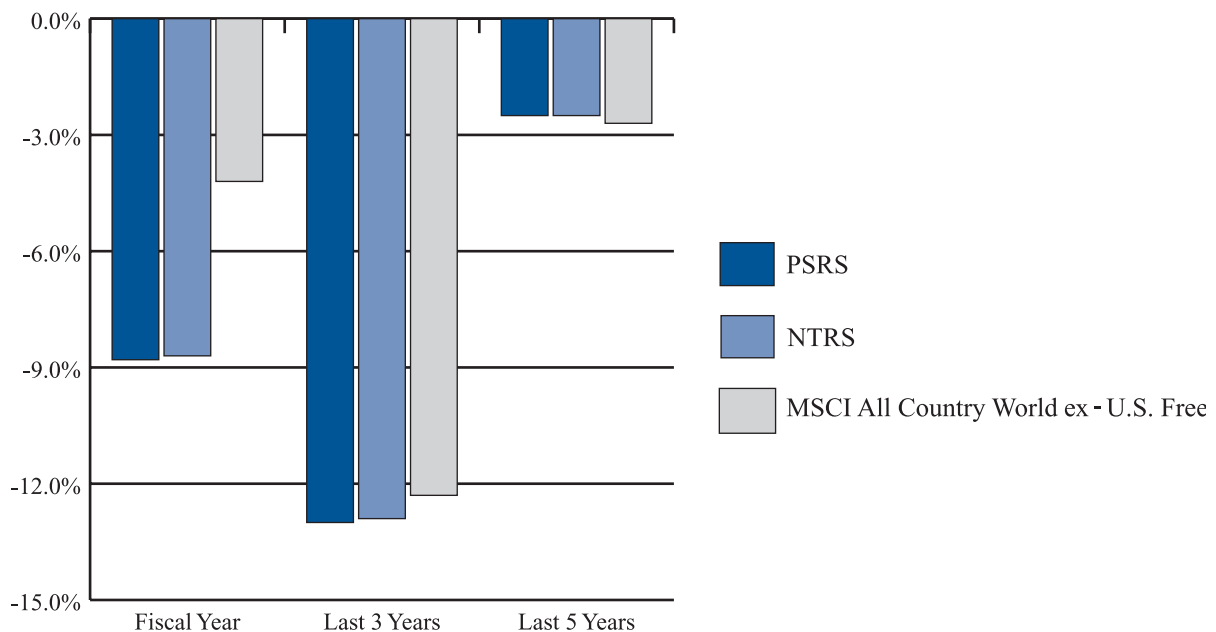
Periods ended June 30, 2003

### Non-U.S. Equity Investment Returns

The PSRS and NTRS benchmark, the MSCI All Country World ex-U.S. Free Index, posted negative returns for the third consecutive fiscal year, making it the worst downturn in both magnitude and duration in the international markets over the last 60 years. The total returns on the PSRS and NTRS non-U.S. equity portfolios for the fiscal year ended June 30, 2003 were -8.8% and -8.7% respectively compared to the benchmark return of -4.2%. Both Systems have underperformed the benchmark for the fiscal and 3-year time periods.

### Non-U.S. Equity Investment Returns 6/30/03

	Fiscal Year	Last 3 Years	Last 5 Years
PSRS	-8.8%	-13.0%	-2.5%
NTRS	-8.7	-12.9	-2.5
MSCI All Country World - ex U.S. Free	-4.2	-12.3	-2.7



## Real Return Pool Review

As of June 30, 2003

### Market Value

As of June 30, 2003, the combined PSRS/NTRS real return pool assets, managed by one external investment advisor, had a market value of approximately \$1.2 billion and represented 5.5% of total assets.

### Real Return Pool Structure

In January 2002, the Board approved the real return pool as a new asset class. Its focus is to earn stable, but meaningful, real returns across varying economic and market cycles. This pool was approved with a target allocation of 5.0% and could include Treasury Inflation-Protected Securities (TIPS) and Real Estate Investment Trusts (REITs). In April 2003, Global Inflation-Indexed Securities and sectors of the Lehman Aggregate Index were approved as two new sub-asset classes for inclusion in the real return pool.

The following table displays the top 10 holdings in the real return pool as of June 30, 2003.

Top 10 Largest Holdings* June 30, 2003	Combined Market Value	% of Total Real Return Pool
USTN, Inflation Indexed, 3.875%, 1/15/09	\$ 223,162,418	19.7%
USTN, Inflation Indexed, 4.25%, 1/15/10	200,944,478	17.8
TENNESSEE VALLEY AUTHORITY, CPI indexed, 3.375%, 1/15/07	139,971,831	12.4
USTN, Inflation Indexed, 3.5%, 1/15/11	126,024,925	11.2
USTN, Inflation Indexed, 3.375%, 1/15/07	123,133,089	10.9
USTN, Inflation Indexed, 3.625%, 1/15/08	116,660,014	10.3
USTN, Inflation Indexed, 3.0%, 7/15/12	76,421,334	6.8
USTN, Inflation Indexed, 3.375%, 1/15/12	48,505,680	4.3
U.S. Treasury Note, 2.625%, 5/15/08	4,894,717	0.4
HOUSEHOLD FINANCE CORP, 8.875%, 2/15/06	4,867,170	0.4
Total	\$ 1,064,585,656	94.2%

### Key to Holdings

USTN = U.S. Treasury Note

### Real Return Pool Investment Advisor

The following firm was under contract with PSRS/NTRS as of June 30, 2003 for management of real return pool securities.

Investment Advisor	Investment Style	Combined Portfolio Market Value** As of June 30, 2003	% of Total Market Value
NISA Investment Advisors	Active Real Return	\$ 1,195,824,293	5.5%
Total		\$ 1,195,824,293	5.5%

\*Includes only actively managed separate accounts.

\*\*Includes manager cash.



## Real Return Pool Review

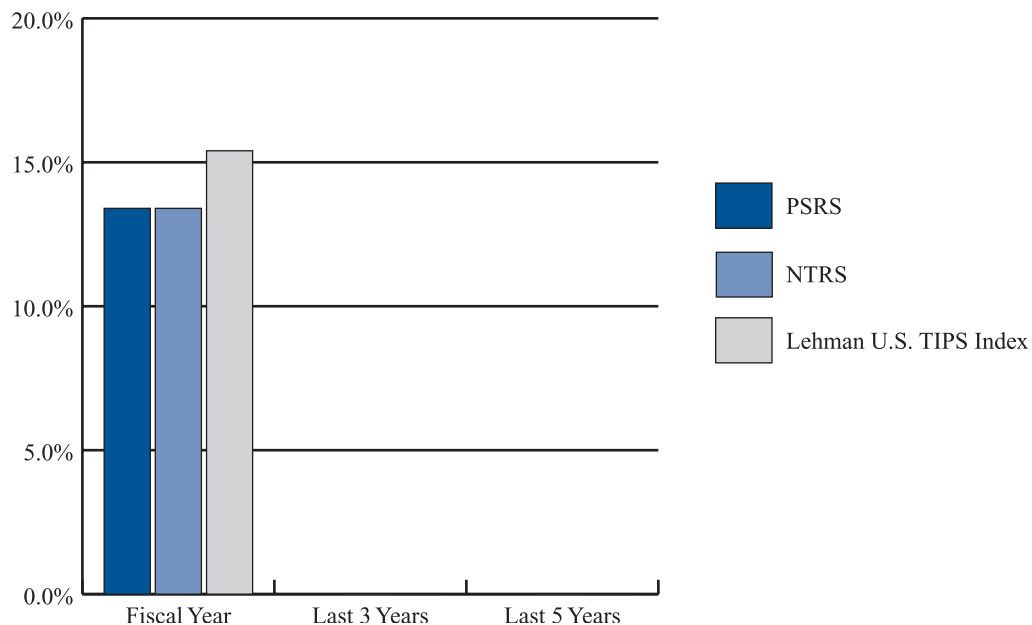
Periods Ended June 30, 2003

### Real Return Pool Investment Returns

TIPS were one of the highest returning investment grade asset classes in fiscal year 2003 and provided the Systems with the highest absolute return in the portfolio. The total return on the PSRS and NTRS real return portfolios for the fiscal year ended June 30, 2003 was 13.4%. The Systems' active real return pool underperformed its benchmark (Lehman U.S. TIPS Index) by 2.0% for the period.

### Real Return Pool Investment Returns 6/30/03

	Fiscal Year	Last 3 Years	Last 5 Years
PSRS	13.4%	NA	NA
NTRS	13.4	NA	NA
Lehman U.S. TIPS Index	15.4	NA	NA



## PSRS Broker Commissions Report

For The Fiscal Year Ended June 30, 2003

Brokerage Firm	Shares Traded	Dollars Traded	Commissions Paid	Cost Per Share
DEUTSCHE BANK SECURITIES, INC	44,218,152	\$ 1,074,580,854.99	\$ 978,810.67	\$ 0.02
MORGAN STANLEY CO INCORPORATED	42,430,051	563,901,928.54	883,485.03	0.02
LEHMAN BROTHERS INC	31,027,536	695,453,896.14	749,160.36	0.02
GOLDMAN SACH + CO	49,411,307	512,682,577.52	714,616.38	0.01
CREDIT SUISSE FIRST BOSTON CORP	29,645,500	252,108,557.17	618,168.50	0.02
MERRILL LYNCH PIERCE FENNER + SMITH	20,743,833	295,233,429.11	501,383.57	0.02
UBS WARBURG LLC	14,798,106	197,101,925.20	450,458.93	0.03
SALOMON SMITH BARNEY	11,663,266	188,107,856.44	356,863.94	0.03
INVESTMENT TECHNOLOGY GROUP INC	15,993,317	458,652,173.30	329,188.78	0.02
J P MORGAN SECURITIES INC	8,910,226	136,217,763.46	299,241.42	0.03
INSTINET	11,877,563	248,691,555.54	240,688.86	0.02
SBC WARBURG	10,923,704	98,245,032.36	224,220.12	0.02
BROCKHOUSE AND COOPER INC	29,723,356	206,846,496.23	203,052.94	0.01
WEEDEN + CO	5,182,177	117,894,019.92	194,950.03	0.04
JEFFERIES COMPANY INC	4,233,795	119,417,662.86	184,441.25	0.04
SANFORD C BERNSTEIN CO LLC	3,989,263	76,451,447.95	170,965.97	0.04
STATE STREET BROKERAGE SERVICES	9,942,870	249,969,121.17	167,638.96	0.02
DRESDNER KLEINWORT BENSON SECS	13,197,676	63,631,457.08	146,454.43	0.01
LA BRANCHE FINANCIAL SERVICES INC	4,293,088	72,701,039.39	143,432.22	0.03
BANC/AMERICA SECUR.LLC MNTGMRY DIV	2,313,300	53,709,037.76	115,805.00	0.05
BEAR STEARNS + CO INC	2,886,085	81,333,015.64	114,011.25	0.04
CANTOR FITZGERALD AND CO	4,122,938	59,934,008.12	107,037.19	0.03
ABN AMRO SECURITIES (USA) INC	7,162,657	56,043,509.39	98,793.21	0.01
FIRST UNION CAPITAL MARKETS	2,022,740	47,760,972.90	92,999.50	0.05
CAPITAL INSTITUTIONAL SERVICES	2,151,157	47,698,962.04	89,788.33	0.04
FACTSET DATA SYSTEMS INC	1,889,933	33,030,193.34	89,007.65	0.05
DRESDNER BANK AG NEW YORK	5,793,000	39,096,320.58	86,532.05	0.01
RBC DAIN RAUSCHER INC	2,150,406	38,139,659.60	82,954.93	0.04
BNY CLEARING SERVICES LLC	2,451,196	70,261,573.01	82,188.80	0.03
CREDIT SUISSE FIRST BOSTON EQUITIES	3,013,810	35,575,060.52	79,723.94	0.03
JB WERE CAPITAL MARKETS	4,484,744	24,875,199.56	78,286.14	0.02
US BANCORP PIPER JAFFRAY INC	1,671,502	33,286,157.26	77,196.00	0.05
KNIGHT SECURITIES	1,703,458	32,225,335.11	77,027.10	0.05
CROIX SECURITIES, BCC CLEARING	2,676,154	77,047,514.92	75,182.61	0.03
CITICROUP GLOBAL MARKETS INC	2,463,504	58,622,973.75	71,824.88	0.03
WARBURG DILLON READ	3,608,978	41,483,347.68	63,032.02	0.02
PRUDENTIAL SECURITIES INCORPORATED	1,270,860	30,351,143.45	61,517.35	0.05
BROADCORT CAPITAL (THRU ML)	1,184,600	36,767,582.04	59,230.00	0.05
SANDLER ONEILL + PART LP	1,244,225	29,631,536.42	58,369.25	0.05
NOMURA SECURITIES INTERNATIONAL INC	1,346,627	24,685,755.46	56,486.09	0.04
Other (<\$56,000)	112,354,379	1,303,427,703.87	2,470,118.19	0.02
Total	532,171,039	\$ 7,882,875,356.79	\$ 11,744,333.84	\$ 0.02

# NTRS Broker Commissions Report

For The Fiscal Year Ended June 30, 2003

Brokerage Firm	Shares Traded	Dollars Traded	Commissions Paid	Cost Per Share
DEUTSCHE BANK SECURITIES, INC	3,592,022	\$ 86,229,503.55	\$ 79,609.97	\$ 0.02
MORGAN STANLEY CO INCORPORATED	3,691,480	52,364,081.61	77,059.56	0.02
GOLDMAN SACHS + CO	4,828,942	49,206,589.39	69,620.41	0.01
LEHMAN BROTHERS INC	2,921,805	68,911,817.40	57,960.43	0.02
CREDIT SUISSE FIRST BOSTON CORP	2,274,136	22,915,553.91	57,894.88	0.03
UBS WARBURG LLC	1,063,336	17,584,583.02	38,241.20	0.04
INVESTMENT TECHNOLOGY GROUP INC	1,667,933	55,742,144.65	34,128.13	0.02
MERRILL LYNCH PIERCE FENNER + SMITH	870,229	17,568,664.51	31,270.60	0.04
STATE STREET BROKERAGE SERVICES	1,636,447	56,290,230.05	26,199.04	0.02
SALOMON SMITH BARNEY INC	744,418	12,125,831.41	24,314.20	0.03
J P MORGAN SECURITIES INC	656,630	10,053,737.08	22,092.61	0.03
INSTINET	1,019,676	27,480,922.56	20,513.20	0.02
WEEDEN + CO	441,339	10,000,949.17	16,378.05	0.04
JEFFERIES & COMPANY INC	345,081	8,730,652.91	15,381.95	0.04
BROOKHOUSE AND COOPER	2,343,519	15,992,790.65	12,961.15	0.01
SBC WARBURG	592,780	5,429,050.55	12,380.42	0.02
SANFORD C BERNSTEIN CO LLC	288,797	5,342,218.34	12,181.65	0.04
DRESDNER KLEINWORT BENSON SECS	643,720	4,115,463.73	10,359.99	0.02
LA BRANCHE FINANCIAL #2	300,342	4,770,195.93	9,997.16	0.03
BANC/AMERICA SECUR.LLC MNTGMRY DIV	198,016	4,376,810.30	9,660.80	0.05
FIRST UNION CAPITAL MARKETS	196,430	4,252,923.62	8,986.00	0.05
CANTOR FITZGERALD AND CO	335,204	5,007,212.39	8,871.35	0.03
BEAR STEARNS + CO INC	221,439	6,098,872.95	8,786.81	0.04
ABN AMRO SECURITIES (USA) INC	567,454	4,436,189.76	7,820.07	0.01
CAPITAL INSTITUTIONAL SERVICES	178,721	3,997,452.15	7,440.69	0.04
CREDIT SUISSE FIRST BOSTON EQUITIES	255,949	3,055,933.04	7,014.64	0.03
CROIX SECURITIES, BCC CLEARING	248,862	7,161,215.82	7,004.56	0.03
MORGAN KEEGAN & CO INC	150,865	2,937,643.18	6,933.25	0.05
RBC DAIN RAUSCHER INC	177,154	3,108,428.58	6,601.47	0.04
KNIGHT SECURITIES	196,621	3,462,591.54	6,570.85	0.03
FACTSET DATA SYSTEMS	137,800	2,309,679.93	6,406.00	0.05
BEAR STEARNS SECURITIES CORP	146,999	3,648,612.54	5,887.58	0.04
MERRILL LYNCH INTERNATIONAL	523,461	3,730,238.73	5,866.01	0.01
CITIGROUP GLOBAL MARKETS INC	174,924	5,315,478.42	5,743.38	0.03
U S BANCORP PIPER JAFFRAY INC	119,475	2,483,524.39	5,539.95	0.05
BAIRD, ROBERT W., & COMPANY INC	105,005	2,169,548.75	5,059.15	0.05
PRUDENTIAL SECURITIES INC	103,980	2,473,776.25	5,037.95	0.05
NEEDHAM + COMPANY	125,495	1,270,925.82	4,905.75	0.04
FRIEDMAN BILLINGS + RAMSEY	123,554	2,169,661.79	4,347.70	0.04
Other (<\$4,300)	10,976,905	110,830,879.05	209,844.64	0.02
Total	45,186,945	\$ 715,152,579.42	\$ 972,873.20	\$ 0.02

# Investment Summary

As of June 30, 2003

	PSRS/NTRS Combined Funds - FY2003	Percent of Total Market Value		
		FY2003	FY2002	FY2001
<b>Total Market Value</b>				
U.S.Fixed Income	\$ 8,628,540,395	40.0%	43.5%	45.9%
U.S. Equity	8,205,182,976	38.0	34.6	38.5
Non-U.S. Equity	2,877,469,539	13.3	14.0	13.7
Real Return Pool	1,130,020,851	5.2	5.3	
Cash and Short-Term Investments	744,442,610	3.5	2.6	1.9
Total	\$ 21,585,656,371	100.0 %	100.0%	100.0%

## Reconciliation with Statement of Plan Net Assets

Accrued payable for investments purchased	\$ 2,309,029,566
Accrued income payable	1,601,216
Accrued receivable for investments sold	(1,155,538,911)
Accrued income receivable	(79,250,403)
Short-term investments designated for benefits	(61,522,139)
<b>Statement of Plan Net Assets</b>	<b>\$ 22,599,975,700</b>

# Investment Expenses

For the Year Ended June 30, 2003

	PSRS	NTRS	Total
<b>Investment Managers</b>			
Alliance Capital Management	\$ 1,767,000	\$ 133,000	\$ 1,900,000
Aronson & Partners	939,806	68,944	1,008,750
Bank of Ireland Asset Management	1,927,322	147,678	2,075,000
BlackRock Financial Management	1,110,048	83,552	1,193,600
BPI Global Asset Management LLC	1,822,800	137,200	1,960,000
Brinson Partners	1,331,927	100,253	1,432,180
Chartwell Investment Partners	302,250	22,750	325,000
Dimensional Fund Advisors	644,551	48,589	693,140
DSI International Management	879,706	66,214	945,920
E-MAP	2,678,708	206,386	2,885,094
INVESCO Global Asset Management	2,041,342	158,658	2,200,000
NISA Investment Advisors	1,323,470	106,183	1,429,653
Oechsle International Advisors	2,046,000	154,000	2,200,000
Pathway	249,663	18,792	268,455
Payden & Rygel	790,500	59,500	850,000
State Street Global Advisors	547,630	44,783	592,413
TCW Asset Management Company	1,847,426	154,844	2,002,270
Thomson, Horstmann & Bryant, Inc.	960,461	74,019	1,034,480
Wellington Management Company	837,000	63,000	900,000
<b>Investment Management Expense</b>	<b>24,047,610</b>	<b>1,848,345</b>	<b>25,895,955</b>
<b>Investment Consultants</b>			
Strategic Investment Solutions	339,073	25,478	364,551
<b>Custodial Services</b>			
State Street Bank & Trust	1,557,314	121,441	1,678,755
<b>Staff Investment Expenses</b>	<b>345,198</b>	<b>230,349</b>	<b>575,547</b>
<b>Total Investment Expenses</b>	<b>\$ 26,289,195</b>	<b>\$ 2,225,613</b>	<b>\$ 28,514,808</b>

**Certification of Actuarial Results**

**Calculation of Unfunded  
Actuarial Accrued Liability**

**Required Contribution Rate and  
Amortization of Unfunded Liability**

**Analysis of Actuarial Gains and Losses**

**Summary of Active Member Valuation Data**

**Solvency Test**

**Schedule of Retirees and Beneficiaries  
Added to and Removed from Retirement Rolls**

**Summary Plan Descriptions**

**ACTUARIAL SECTION**



GABRIEL, ROEDER, SMITH & COMPANY  
CONSULTANTS & ACTUARIES

3017 Douglas Boulevard • Suite 300 • Roseville, CA 95661 • 916-774-7580 • fax 916-774-7581

October 24, 2003

Board of Trustees  
Public School Retirement System of Missouri  
Non-Teacher School Employee Retirement System of Missouri  
3210 West Truman Boulevard  
Jefferson City, MO 65109

Re: Certification of Actuarial Results

Dear Members of the Board:

At your request, we have performed actuarial valuations of the Public School Retirement System and the Non-Teacher School Employee Retirement System of Missouri as of June 30, 2003. An actuarial valuation of each system is performed annually.

The actuarial valuation is based upon:

- a. *Data relative to the Members of the Systems* – Data for all members of each system was provided by the staff. Such data is tested for reasonableness by the actuary but is used unaudited.
- b. *Assets of the Fund* – The values of the trust fund assets for each system are provided by the staff. A market related value of assets, with gains and losses recognized ratably over five years, is used to develop actuarial results.
- c. *Actuarial Method* – The actuarial method utilized for each system is the Entry Age Normal Cost Method. The objective of this method is to finance the benefits of the systems as a level percentage of pay over the entire career of each member. Any Unfunded Actuarial Accrued Liability (UAAL) under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL.
- d. *Actuarial Assumptions* – The actuarial assumptions used in the valuation of each system are summarized in the next few pages. The Board has adopted this set of assumptions effective for the actuarial valuations as of June 30, 2001 and later.

The actuarial assumptions and methods used are in accordance with paragraph 36 of GASB Statement Number 25.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by the staff with our guidance.

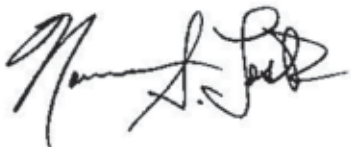
The Board's statement of funding policy provides that:

1. The Board of Trustees shall adopt actuarial assumptions, each of which individually represents a reasonable long-term estimate of anticipated experience under the system, derived from experience studies conducted every fifth year.
2. The actuarial funding method used shall be the Entry Age Normal Method with normal costs calculated as a percentage of payroll.
3. It shall be the general objective to maintain an amortization period of 30 years or less in the funding of the Unfunded Actuarial Accrued Liability. Whenever a change is made in a system's benefit and contribution rate structures, the amortization period for the system after this change should not exceed 30 years initially.
4. If an escalation in future payroll is assumed in determining the amortization payments toward the Unfunded Actuarial Accrued Liability, then the annual rate of such escalation shall not exceed the expected rate of expansion in total system payroll based upon the actuarial assumptions.
5. Assets used in the actuarial valuation shall be valued using adjusted market values averaged over a period of five years.
6. Annual actuarial valuations shall be made of the system's assets and liabilities. The contribution rate shall be established based on the results of these valuations.

Due to the drastic volatility of the investment markets, we recommended and the Board approved a marking of assets to market for this valuation. The five year smoothing method will be restarted prospectively beginning with the Valuations as of June 30, 2004.

The results of the valuations are based on the data and actuarial techniques described above and on the provisions of each system at the valuation date. Based on these items, we certify these results to be true and correct.

Sincerely,



Norman S. Losk, F.S.A  
Senior Consultant



Alex Rivera, A.S.A  
Senior Consultant



## PSRS Calculation of Unfunded Actuarial Accrued Liability

As of June 30, 2003

(1) Present value of future benefits for:	
Active members	\$ 19,514,213,303
Service retirees	10,835,557,272
Disability retirees	108,417,686
Tax-sheltered annuitants	1,292,088
Survivors	400,378,594
Death benefits	41,897,255
Inactive members	337,443,518
Total	<u>31,239,199,716</u>
(2) Present value of future normal costs	<u>6,519,749,732</u>
(3) Actuarial accrued liability (1)-(2)	24,719,449,984
(4) Actuarial value of assets	<u>20,047,981,537</u>
(5) Unfunded actuarial accrued liability (3)-(4)	<u><u>\$ 4,671,468,447</u></u>

## PSRS Required Contribution Rate and Amortization of Unfunded Liability

As of June 30, 2003

	Percentage of Payroll
(1) Total contribution rate, member and employer	21.00%
(2) Normal cost rate	20.92
(3) Approximate rate available for unfunded actuarial accrued liability (1) - (2)	0.08
(4) Number of years required to amortize unfunded actuarial accrued liability	Never*
(5) Benchmark contribution rate for the System to amortize the UAAL in 30 years	27.75%

\*While the current contribution rate will not fund the UAAL, the funding process is designed to fund that item over time.



# PSRS Analysis of Actuarial Gains and Losses

**As of June 30, 2003**

(Dollar Amounts in Thousands)

(1) Unfunded actuarial liability as of July 1, 2002		\$ 1,097,832
(2) Normal cost for 2003 plan year		661,202
(3) Contribution received during year		(734,413)
(4) Interest to year end at 8.00% on (1) (2) and (3)		<u>84,955</u>
(5) Expected unfunded actuarial liability as of June 30, 2003		1,109,576
(6) Actuarial (gain)/loss during the year		
From investments	\$ 888,586	
From actuarial liabilities	<u>(166,942)</u>	
Total		721,644
(7) Change in asset method, fresh start to MV as of June 30, 2003		<u>2,840,248</u>
(8) Unfunded actuarial accrued liability as of June 30, 2003		<u><u>\$ 4,671,468</u></u>

## NTRS Calculation of Unfunded Actuarial Accrued Liability

As of June 30, 2003

(1) Present value of future benefits for:	
Active members	\$ 2,082,439,161
Service retirees	689,243,653
Disability retirees	14,446,037
Survivors	27,369,456
Inactive members	<u>71,025,846</u>
Total	2,884,524,153
(2) Present value of future normal costs	<u>834,808,437</u>
(3) Actuarial accrued liability (1)-(2)	2,049,715,716
(4) Actuarial value of assets	<u>1,677,769,645</u>
(5) Unfunded actuarial accrued liability (3)-(4)	<u><u>\$ 371,946,071</u></u>

## NTRS Required Contribution Rate and Amortization of Unfunded Liability

As of June 30, 2003

	Percentage of Payroll
(1) Total contribution rate, member and employer	10.00%
(2) Normal cost rate	10.58%
(3) Approximate rate available for unfunded actuarial accrued liability (1) - (2)	-0.58%
(4) Number of years required to amortize unfunded actuarial accrued liability	Never*
(5) Benchmark contribution rate for the System to amortize the UAAL in 30 years	12.47%

\*While the current contribution rate will not fund the UAAL, the funding process is designed to fund that item over time.

# NTRS Analysis of Actuarial Gains and Losses

As of June 30, 2003

## Amount

(1) Unfunded actuarial liability as of July 1, 2002		\$ 45,363,320
(2) Normal cost for 2003 plan year		89,470,063
(3) Contribution received during year		(97,927,335)
(4) Interest to year end at 8.00% on (1) (2) and (3)		3,297,283
(5) Expected unfunded actuarial liability as of June 30, 2003		40,203,331
(6) Actuarial (gain)/loss during the year		
From investments	\$ 71,183,897	
From liabilities	<u>33,728,280</u>	
Total		<u>104,912,177</u>
(7) Change in asset method, fresh start to MV as of June 30, 2003		<u>226,830,563</u>
(8) Unfunded actuarial accrued liability as of June 30, 2003		<u><u>\$ 371,946,071</u></u>

## PSRS Summary of Actuarial Assumptions and Methods

### Mortality -

Sample rates per 1,000 members by ages: (effective 6/30/01)

Active and service retired members, beneficiaries and survivors

Age	Male	Female
20	0.430	0.280
40	0.891	0.652
60	5.581	3.863
80	45.171	35.362
100	268.815	256.712

### Interest -

8% per annum compound, net of expenses. (1980)

### Termination -

Illustrate per 1,000 members (male and female): (1994)

Age	First Year	Second Year	Third Year	After Three Years
20	140	110	100	35
30	120	100	80	31
40	100	90	60	21
50	90	70	40	8

### Salary increases -

Sample annual rates varying by service: (effective 6/30/01)

Service	Increase	Service	Increase
0	10.0%	9	6.0%
3	7.5	10 & over	5.0
6	7.0		

### Retirement rates -

Sample rates per 1,000 eligible members: (effective 6/30/01)

(1) Age 60		(2) Below 60 or meet rule of 80		(3) Below 60, less than 30 years	
		With 30		Before (1) or (2), After 55/25	
Age	5 Years	Service	Years		
60	250	30	500	First Year Eligible	400
62	250	31 & over	250	Thereafter	200
65	400				
67	300				
70+	1000				

<b>Asset valuation -</b>	Based on five year average of adjusted market value returns (1994).
<b>Payroll increase -</b>	Total covered payroll is assumed to increase 5.0% per year. Additional adjustments are made for those with less than five years of service (effective 6/30/01). Membership is not assumed to increase.
<b>Inflation -</b>	3.5% per annum compound (effective 6/30/97).
<b>Actuarial method -</b>	Entry Age Normal Funding Method is used. Gains and losses are reflected immediately in the unfunded actuarial accrued liability of the System, and amortized in the future as a level percentage of payroll (1947).
<b>Other -</b>	In addition to the above, other assumptions are made with respect to the incidence of disability, the rates of retirement under a special temporary program, mortality of disabled lives, the probability that a member has a spouse, minor children and the ages of the children (effective 6/30/97).
<b>COLA -</b>	3.5% per year. (effective 6/30/97)

*Note: Dates reflect the effective date as adopted by the Board of Trustees.*

# NTRS Summary of Actuarial Assumptions and Methods

## Mortality -

Sample rates per 1,000 members by age: (effective 6/30/01)

Active and service retired members, beneficiaries and survivors

Age	Male	Female
20	0.530	0.284
40	1.156	0.709
60	8.986	4.439
80	68.615	39.396
100	333.461	276.427

## Interest -

8% per annum compound, net of expenses (1980)

## Termination -

Illustrate per 1,000 members (male and female): (1994)

Age	First Year	Second Year	Third Year	After Three Years	
				Males	Females
20	350	170	100	66	50
30	225	170	100	66	50
40	130	125	90	61	45
50	90	85	55	39	29

## Salary Increases -

Sample annual rates varying by years of service: (effective 6/30/01)

Service	Increase	Service	Increase
0	10.0%	3	6.0 %
1	7.5	4	5.75
2	6.75	5 & over	5.0

## Retirement Rates -

Sample rates per 1,000 members: (effective 6/30/01)

(1) Age 60		(2) Below 60		(3) Below 55, with at least 25 years	
Age	5 Years	Service 30 & over	With 30 Years	Service	With 25+ Years
60	100		100	25	45
62	300			27	75
65	350			29	105
66-74	250				
75+	1000				

<b>Asset Valuation -</b>	Based on five year average of adjusted market values (1994).
<b>Payroll Increase -</b>	Total covered payroll is assumed to increase 5.0% per year. Additional adjustments are made for those with less than 5 years of service (effective 6/30/01).
<b>Inflation -</b>	3.5% per annum compound (effective 6/30/97).
<b>Actuarial Method -</b>	Entry Age Normal Funding Method is used. Gains and losses are reflected immediately in the unfunded actuarial accrued liability of the System, and amortized in the future as a level percentage of payroll (1966).
<b>Other -</b>	In addition to the above, other assumptions are made with respect to the incidence of disability, the rates of retirement under a special temporary program, mortality of disabled lives, the probability that a member has a spouse and average work year (effective 6/30/97).

*Note: Dates reflect the effective date as adopted by the Board of Trustees.*

## PSRS Schedule of Active Member Valuation Data

Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/1994	60,595	\$ 1,996,908	\$ 32,955	3.2 %	42.5	12.3
6/30/1995	62,854	2,137,134	34,002	3.2	42.5	12.3
6/30/1996	64,624	2,283,994	35,343	3.9	42.6	12.3
6/30/1997	66,456	2,427,429	36,527	3.3	42.5	12.1
6/30/1998	68,709	2,577,594	37,514	2.7	42.5	11.9
6/30/1999	70,092	2,690,353	38,383	2.3	42.5	11.7
6/30/2000	71,706	2,836,062	39,581	3.1	42.5	11.6
6/30/2001	72,688	2,982,051	41,025	3.7	42.4	11.3
6/30/2002	73,673	3,213,461	43,618	6.3	42.4	11.2
6/30/2003	74,347	3,373,058	45,369	4.0	42.4	11.3

## NTRS Schedule of Active Member Valuation Data

Actuarial Valuation Date	Number of Members	Covered Annual Payroll (000)	Average Annual Salary	% Increase in Average Salary	Average Attained Age	Average Years of Service
6/30/1994	30,662	\$ 452,339	\$ 14,752	3.1%	45.5	7.6
6/30/1995	32,598	495,449	15,199	3.0	45.3	7.3
6/30/1996	34,153	538,022	15,753	3.6	45.2	7.2
6/30/1997	35,982	556,534	15,467	(1.8)	45.1	7.1
6/30/1998	38,672	616,303	15,937	3.0	44.8	6.7
6/30/1999	41,599	685,272	16,473	3.4	44.6	6.5
6/30/2000	43,533	735,400	16,893	2.5	44.5	6.4
6/30/2001	45,517	814,158	17,887	5.9	44.6	6.3
6/30/2002	46,728	895,420	19,162	7.1	44.8	6.4
6/30/2003	46,863	971,177	20,724	8.2	45.3	6.6



## PSRS Solvency Test

(Dollar amounts in thousands)

### Actuarial Accrued Liability for:

Actuarial Valuation Date	Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members, Employer Financed Portion	Net Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Net Assets for:		
	(1)	(2)	(3)		(1)	(2)	(3)
6/30/1994	\$ 2,616,067	\$ 3,206,061	\$ 4,147,631	\$ 9,177,070	100.0%	100.0%	80.9%
6/30/1995	2,856,389	3,705,807	4,419,626	10,193,084	100.0	100.0	82.2
6/30/1996	3,098,448	4,265,851	4,867,447	11,510,625	100.0	100.0	85.2
6/30/1997	3,312,090	4,553,628	4,583,460	13,099,219	100.0	100.0	114.2
6/30/1998	3,541,459	5,523,768	5,405,822	14,979,358	100.0	100.0	109.4
6/30/1999	3,765,854	6,602,915	6,004,376	17,209,870	100.0	100.0	113.9
6/30/2000	3,976,059	7,801,845	6,501,209	19,437,223	100.0	100.0	117.8
6/30/2001	4,129,191	9,504,921	7,648,091	21,146,294	100.0	100.0	98.3
6/30/2002	4,354,507	10,589,546	8,389,885	22,236,105	100.0	100.0	86.9
6/30/2003	4,687,227	11,387,543	8,644,680	20,047,982	100.0	100.0	46.0

## NTRS Solvency Test

(Dollar amounts in thousands)

### Actuarial Accrued Liability for:

Actuarial Valuation Date	Member Contributions	Current Retirees & Beneficiaries	Active & Inactive Members, Employer Financed Portion	Net Assets Available for Benefits	Percentage of Actuarial Liabilities Covered by Net Assets for:		
	(1)	(2)	(3)		(1)	(2)	(3)
6/30/1994	\$ 155,238	\$ 224,650	\$ 306,192	\$ 698,988	100.0%	100.0%	104.2%
6/30/1995	169,846	252,034	364,519	778,325	100.0	100.0	97.8
6/30/1996	185,763	293,937	399,861	876,886	100.0	100.0	99.3
6/30/1997	204,757	312,390	447,065	1,001,035	100.0	100.0	108.2
6/30/1998	225,454	350,860	460,033	1,150,311	100.0	100.0	124.8
6/30/1999	231,252	396,846	540,413	1,335,308	100.0	100.0	130.9
6/30/2000	274,167	467,653	653,480	1,522,660	100.0	100.0	119.5
6/30/2001	301,936	565,126	769,014	1,686,242	100.0	100.0	106.5
6/30/2002	354,296	651,295	850,391	1,810,619	100.0	100.0	94.7
6/30/2003	394,925	731,059	923,732	1,677,770	100.0	100.0	59.7

## PSRS Schedule of Retirees and Beneficiaries Added to and Removed from Retirement Rolls

	Added to Rolls		Removed from Rolls		Rolls End of Year		Average Annual Allowances	% Increase	
	Number	Annual	Number	Annual	Number	Annual		in	in Average
		Allowances		Allowances		Allowances		Allowances	Annual Allowance
2002-2003									
Service retirees	2,057	\$69,930,204	762	\$16,923,921	29,423	\$876,214,561	\$29,780	7.55%	2.82%
Disability retirees	37	724,718	30	543,617	604	11,852,724	19,624	2.27	1.09
Beneficiaries	194	4,069,979	112	1,564,606	2,222	42,122,623	18,957	6.64	2.70
2001-2002									
Service retirees	2,252	76,277,040	763	16,160,604	28,128	814,713,192	28,964	14.53	8.47
Disability retirees	41	890,640	40	688,908	597	11,589,792	19,413	7.27	7.09
Beneficiaries	246	4,309,632	105	1,452,696	2,140	39,500,232	18,458	15.70	8.08
2000-2001									
Service retirees	2,629	84,732,912	749	14,326,116	26,639	711,328,968	26,703	18.15	9.81
Disability retirees	44	896,940	28	432,888	596	10,803,876	18,127	11.23	8.24
Beneficiaries	184	3,478,620	84	978,240	1,999	34,139,676	17,078	19.26	13.29
1999-2000									
Service retirees	2,152		779		24,759	602,073,480	24,317	19.56	12.93
Disability retirees	45		34		580	9,712,992	16,747	11.18	9.07
Beneficiaries	196		90		1,899	28,625,688	15,074	26.30	19.25
1998-1999									
Service retirees	1,947		730		23,386	503,554,404	21,532	20.43	14.16
Disability retirees	41		33		569	8,736,408	15,354	13.75	12.15
Beneficiaries	176		74		1,793	22,665,480	12,641	21.66	14.74
1997-1998									
Service retirees	1,757		728		22,169	418,135,200	18,861	10.86	5.71
Disability retirees	27		32		561	7,680,348	13,690	2.14	3.05
Beneficiaries	187		82		1,691	18,630,408	11,017	13.17	6.14
1996-1997									
Service retirees	1,797		732		21,140	377,172,204	17,842	13.48	7.76
Disability retirees	30		31		566	7,519,512	13,285	3.43	3.61
Beneficiaries	170		74		1,586	16,462,368	10,380	14.99	8.03

Note: Detailed data on retirees added to and removed from the rolls is not available for years prior to 2001.

## NTRS Schedule of Retirees and Beneficiaries Added to and Removed from Retirement Rolls

	Added to Rolls		Removed from Rolls		Rolls End of Year		Average Annual Allowances	% Increase	
	Number	Annual	Number	Annual	Number	Annual		in Annual Allowance	in Average Annual Allowance
		Allowances		Allowances		Allowances			
2002-2003									
Service retirees	966	\$ 7,800,240	488	\$ 1,584,787	13,619	\$ 63,860,114	\$ 4,689	10.59%	6.71%
Disability retirees	31	135,547	13	39,611	405	1,448,560	3,577	7.60	2.82
Beneficiaries	96	417,644	25	85,565	813	2,755,081	3,389	14.19	4.21
2001-2002									
Service retirees	970	7,570,872	461	1,280,604	13,141	57,743,412	4,394	22.43	17.68
Disability retirees	30	146,556	21	58,956	387	1,346,280	3,479	17.02	14.29
Beneficiaries	97	352,764	18	33,996	742	2,412,648	3,252	26.76	13.27
2000-2001									
Service retirees	978	6,089,376	459	1,165,548	12,632	47,164,044	3,734	18.68	13.81
Disability retirees	53	200,208	22	75,372	378	1,150,476	3,044	18.75	9.03
Beneficiaries	76	201,732	14	19,536	663	1,903,260	2,871	19.02	7.89
1999-2000									
Service retirees	960		447		12,113	39,740,484	3,281	20.58	15.49
Disability retirees	45		14		347	968,844	2,792	26.00	14.76
Beneficiaries	77		21		601	1,599,060	2,661	24.11	12.56
1998-1999									
Service retirees	796		414		11,600	32,956,644	2,841	9.17	5.57
Disability retirees	35		7		316	768,900	2,433	14.42	4.29
Beneficiaries	67		19		545	1,288,428	2,364	14.42	4.32
1997-1998									
Service retirees	841		434		11,218	30,189,600	2,691	10.79	6.74
Disability retirees	29		17		288	672,024	2,333	9.04	4.48
Beneficiaries	59		22		497	1,126,008	2,266	11.89	3.56
1996-1997									
Service retirees	823		388		10,811	27,249,996	2,521	12.37	7.87
Disability retirees	22		13		276	616,320	2,233	8.01	4.49
Beneficiaries	63		18		460	1,006,320	2,188	17.83	6.32

Note: Detailed data on retirees added to and removed from the rolls is not available for years prior to 2001.

## PSRS Summary Plan Description

The Public School Retirement System of Missouri (PSRS) became operative July 1, 1946. It was established by an Act of the Missouri Legislature and is governed by Chapter 169 of the *Revised Statutes of Missouri*. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

PSRS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The system is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

### Administration

The administration of PSRS is vested in a seven-member Board of Trustees, composed of three elected PSRS members, one elected Non-Teacher School Employee Retirement System (NTRS) member, and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or an NTRS retiree, are named by the governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor a state elected official. The Board appoints an executive director who is responsible for employment of the retirement office staff, routine operation of the System, and advisement of the Board on all matters pertaining to the System.

### Member Participation

PSRS membership is automatic, regardless of position, for certificated, full-time employees of public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public junior college districts in Missouri, and of PSRS. Certificated, part-time employees whose services would qualify them for membership in the Non-Teacher School Employee Retirement System are contributing members of PSRS unless NTRS membership is elected.

Members working in covered employment are considered *active* members. Such members contribute 10.5% of total compensation to PSRS. The contributions are deducted and remitted by the employer and are credited by PSRS to individual member accounts. Since July 1, 1989, member contributions have been tax-deferred for federal and state income tax purposes under IRS 414(h)(2). Contributions are not considered income for such purposes until they are paid as a lump sum refund or monthly benefits.

Members not working in covered employment are considered *inactive* members.

Interest at a rate set each year by the Board of Trustees is credited to individual member accounts each June 30 on the previous June 30 balance. The rate credited on June 30, 2003 was 6%. Since PSRS is a defined benefit plan, benefits are based upon the member's final average salary and years of creditable service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to credit earned for covered service, members may purchase credit in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-employment Rights Act of 1994 (USERRA).

### Employer Participation

The employers served by PSRS withhold members' contributions from salary payments and match those contributions at a current rate of 10.5% of payroll. Employer contributions and investment earnings on those funds are placed by PSRS in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. Employers are responsible for remitting contributions promptly and for furnishing contribution information and new membership records to PSRS. Employers also provide record data when members apply for benefits or for refunds upon termination of employment.

### Survivor Benefits

The designated beneficiary of a member who dies before retirement is eligible for a lump sum refund of the member's contributions and interest. If the beneficiary is an eligible dependent and the member dies while in covered employment with at least two years of credit for such service, or while eligible for disability retirement benefits, monthly survivor benefits based on a percentage of the member's salary for the last full year of covered service can be elected instead of the contribution refund.

In lieu of a lump sum refund or monthly survivor benefits, survivors with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Option 2 retirement plan. Such benefits are payable when the member would have been eligible for early or normal service retirement.

### Refund of Contributions

Member contributions and interest are fully refundable upon termination of service or death. All credit and benefit rights are forfeited upon voluntary withdrawal or automatic termination of membership.

A member may, upon returning to covered employment, reinstate the credit forfeited through termination of a previous membership by repaying the money refunded plus interest.

### Membership Termination

Membership is terminated by death, retirement, withdrawal of contributions, or absence from covered employment by a non-vested member for five consecutive school years.

### Disability Retirement Benefits

Disability retirement benefits are payable to eligible members who, because of permanent disability, are unable to earn a livelihood in any occupation. In most instances, the disability retirement benefit is calculated at 50% of the member's salary for the last full year of creditable service.

### Service Retirement Benefits

Service retirement benefits are payable to members who have terminated covered employment and have met certain eligibility requirements.

**Benefit Formula**—All service retirement benefits are based on a formula which multiplies final average salary by the applicable formula factor, by the years of credit and, in the case of early retirement, by an age reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36; the applicable factor is determined by the type of retirement eligibility; total credit is the amount accumulated at retirement for covered service and purchased credit; and the age factor, where applicable, is determined by the age at retirement.

**Normal Retirement**—A member may retire with benefits calculated under the standard (2.5%) formula factor at age 60 with five years of credit, at any age with 30 years of credit, or when a combination of age and service credit equals 80. Between 7/1/2001-6/30/2008, a member may retire with a 2.55% formula factor with 31 or more years of service. A special provision in effect until July 1, 2008 allows members under age 55 with 25.0 to 29.9 years of credit to retire with benefits calculated under a modified formula factor ranging from 2.2% to 2.4% but with no age reduction factor applied.

**Early Retirement**—A member may retire with benefits calculated under the standard (2.5%) formula with an age reduction factor applied, at age 55 with five years of credit or at any age with 25 years of credit, as long as they do not qualify for Rule of 80.

**Payment Options**—A retiring member may elect to receive the maximum benefits payable under the Single Life option, or may elect to receive a reduced benefit under one of three Joint-and-Survivor options or under one of two Term-Certain options, to provide survivor benefit coverage in varying degrees after the retiree's death.

Certain benefit minimums apply to normal or early retirement with 15 or more years of credit. The minimums for 15 but fewer than 25 years of credit are reduced if a Joint-and-Survivor or a Term-Certain option is elected and/or if an age factor is applicable because of early retirement. The minimums for 25 or more years of credit are reduced only if a Joint-and-Survivor or a Term-Certain option is elected.

### Post-Retirement Increases

Cost-of-living adjustments (COLAs) are provided beginning the second January after retirement to service and disability retirees, and to Joint-and-Survivor beneficiaries of deceased retirees. The annual COLA, not to exceed 5%, is based on the increase in the cost of living as measured by the Department of Labor Consumer Price Index for the previous fiscal year and is applied to the current benefit of each eligible recipient. Lifetime COLAs are limited to 80% of the original retirement benefit.

### Member Handbook

A member handbook containing detailed information concerning the retirement program can be obtained from the retirement office upon request.

## NTRS Summary Plan Description

The Non-Teacher School Employee Retirement System of Missouri (NTRS) was established by an Act of the Missouri Legislature effective November 1, 1965, and is governed by Chapter 169 of the Revised Statutes of Missouri. Its purpose is to provide benefits to members and their dependents at retirement or in the event of death or disability prior to retirement.

NTRS is a defined benefit plan funded on an actuarial reserve basis, which guarantees availability of funds to pay benefits as prescribed by law. The System is established as an independent trust fund and is not subject to direction by any state agency. Administrative expenses are paid entirely out of investment earnings.

### Administration

The statutes provide that the responsibility for the operation and administration of the retirement system is vested in The Public School Retirement System (PSRS) Board of Trustees sitting as the Board of Trustees for NTRS. The Board is comprised of three elected PSRS members, one elected Non-Teacher School Employee Retirement System (NTRS) member and three appointed trustees. The four elected trustees are selected by vote of the members and retirees of both Systems. Two are elected each even-numbered calendar year to serve four-year terms. The three appointed trustees, one of whom must be a PSRS or an NTRS retiree, are named by the governor to serve four-year terms. The appointed trustees must be residents of school districts included in the Retirement System but not employees of such districts nor state employees nor a state elected official.

The Board appoints an executive director who is responsible for employment of the retirement office staff and routine operation of the system, and who acts as advisor to the Board on all matters pertaining to the System.

### Member Participation

**Active Members**—are currently working in covered employment. Employees contribute 5.0% of their total compensation to NTRS. These amounts are deducted by the employing district and then forwarded to NTRS by the payroll officer and applied to the member's account in the NTRS. NTRS membership is automatic, regardless of position, for all persons not covered by The Public School Retirement System who are regularly employed for 20 or more hours a week by the public school districts in Missouri (except the St. Louis city and the Kansas City school districts), public junior college districts in Missouri, and by the Retirement System.

NTRS membership can be elected by employees with Missouri teaching certificates who work in any position for 20 or more hours weekly but less than full time; however, PSRS membership is automatic if an NTRS election is not made. The election to join NTRS must be filed with the Board of Trustees within 90 days after entering first time, part-time employment.

Since July 1, 1989, member contributions have been tax-deferred for federal and state income tax purposes under IRC 414(h)(2). Contributions are not considered as income for federal or state income tax purposes until they are paid in a lump-sum refund or in monthly benefits.

Individual accounts are maintained for all NTRS members. Interest is credited each June 30 on the previous June 30 balance. The interest rate set annually by the Board of Trustees was 6% on June 30, 2003. Since NTRS is a defined benefit plan, benefits are based upon the member's final average salary and years of creditable service. The amount of interest credited to a member's account has no bearing on the monthly benefit amount payable at retirement.

In addition to credit earned for covered service, members may purchase credit in various categories including several types of leave, out-of-state school service, other public and private employment, active U.S. military duty, and service under the federal Uniformed Services Employment and Re-employment Rights Act of 1994 (USERRA).

**Inactive Members**—have contributions on deposit with NTRS but are not currently working in covered employment.

**Member's Survivors**—When a member dies before retirement, the designated beneficiary becomes eligible for a lump sum refund of the employee's contributions and interest. In lieu of the lump sum refund, beneficiaries with an insurable interest and beneficiaries of disability retirees may elect to receive monthly benefits under the Option 2 retirement plan. Benefits are payable to the beneficiary under the Option 2 plan when the member would have been eligible for early or normal retirement.

### Membership Termination

Membership in the System is terminated by death, retirement, withdrawal of contributions, or absence from covered employment by a non-vested member for five consecutive school years.

### Employer Participation

The employers served by NTRS withhold members' contributions from salary payments and match employee contributions at a current rate of 5% of payroll. Employer contributions and investment earnings on those funds are



placed in a general reserve account to pay monthly benefits to retirees and to beneficiaries of deceased members. It is the responsibility of the employers to remit contributions to the Retirement System promptly and to supply NTRS with new membership records and members' contribution information. Employers also provide needed data when members apply for benefits or refund of contributions upon termination of employment.

### **Refund of Contributions**

Member contributions plus interest are fully refundable upon termination of service or death. All credit and benefit rights are forfeited upon voluntary withdrawal or automatic membership termination. Voluntary withdrawal is available to members who cease covered employment. Automatic termination occurs when a non-vested member is absent from covered employment for five consecutive years. Only the money the member has contributed and accrued interest are refundable.

A member may, upon returning to covered employment, reinstate the credit forfeited through termination of a previous membership by repaying the money withdrawn plus interest.

### **Service Retirement Benefits**

Service retirement benefits are payable to persons who have terminated employment and who have met age and service requirements.

**Benefit Formula**—All service retirement benefits are based on a formula which multiplies final average salary by the applicable formula factor, by the years of credit and, in the case of early retirement, by an age reduction factor. Final average salary is obtained by dividing the total salaries for the three highest consecutive years of service by 36; the applicable factor is determined by the type of retirement eligibility; total credit is the amount accumulated at retirement for covered service and purchased credit; and the age factor, where applicable, is determined by the age at retirement.

Because of the conversion of the System from a formula integrated with Social Security to the present basis, a special "frozen benefit" is in effect for certain members for service prior to July 1, 1973.

**Normal Retirement**—A member may retire with benefits calculated under the standard (1.61%) formula at age 60 with five years of credit, at any age with at least 30 years of service, and at the point where the member's age plus creditable service equals or exceeds 80 (Rule of 80). A member may retire under the standard (1.61%) formula when

the member qualifies for Rule of 80 or 30 and out and will receive an additional .8% multiplier until he/she reaches minimum eligibility age for Social Security benefits (currently age 62). A special provision in effect until July 1, 2008 allows members under age 55 with 25.0 to 29.9 years of credit to retire with benefits calculated under a modified formula factor ranging from 1.51% to 1.59% but with no age reduction factor applied.

**Early Retirement**—A member may retire with benefits calculated under the standard (1.61%) formula with an age reduction factor applied, at age 55 with five but fewer than 25 years of credit.

**Options**—A retiring member may elect to receive the maximum benefits payable under the Single Life option, or may elect to receive a reduced benefit under one of three Joint-and-Survivor options or under one of two Term-Certain options, to provide survivor benefit coverage in varying degrees after the retiree's death. Another option, the Accelerated Payment Plan (APP), allows members to receive a higher NTRS benefit prior to minimum Social Security eligibility age (currently age 62). When the minimum Social Security eligibility age is attained, the member's NTRS benefit is reduced and remains at a reduced level for the remainder of their retirement.

### **Disability Retirement Benefits**

Disability retirement benefits are payable to persons who have met service and eligibility requirements and who, because of permanent disability, are unable to earn a livelihood in any occupation. The disability retirement benefit is calculated at 90% of the normal service retirement.

### **Cost-of-Living Adjustments**

Cost-of-living adjustments (COLAs) are provided starting the fourth January after retirement to service and disability retirees, and to Joint-and-Survivor beneficiaries of deceased retirees. The annual COLA, not to exceed 5%, is based on the increase in the cost of living as measured by the Department of Labor Consumer Price Index for the previous fiscal year and is applied to the current benefit of each eligible recipient. Lifetime COLAs are limited to 80% of the original retirement benefit.

### **Member Handbook**

A Member Handbook which furnishes more complete information concerning provisions of the NTRS law and regulations can be obtained from the retirement office.





**Additions by Source**

**Deductions by Type**

**Summary of Changes in Membership**

**Growth Through the Years**

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**Employees Reported During 2002-2003**

## **STATISTICAL SECTION**

## PSRS Additions by Source

(Dollar amounts in thousands)

Year	Employee Contributions	Employer Contributions	Investment Income	Other Income	Total
1994	\$ 205,230	\$ 200,422	\$ 740,602		\$ 1,146,254
1995	222,124	211,866	1,468,062*	\$ 541	1,902,593
1996	249,854	238,631	1,370,448	25,681	1,884,614
1997	264,736	251,958	2,396,120	494	2,913,308
1998	289,224	273,126	2,609,911	246	3,172,507
1999	302,183	287,699	1,795,732	273	2,385,887
2000	319,579	304,944	1,455,003	274	2,079,800
2001	335,275	324,526	(407,172)	810	253,439
2002	356,685	340,000	(582,958)	2,761	116,488
2003	378,434	355,979	873,340	351	1,608,104

\*Includes recognition of previously deferred income and unrealized gains/losses as a result of adoption of GASB Statement 25.

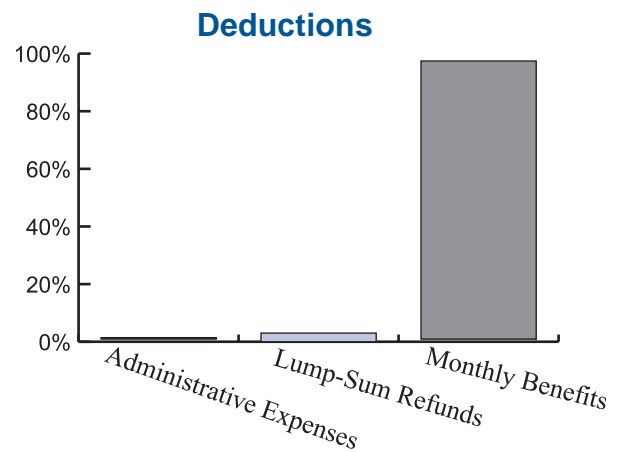
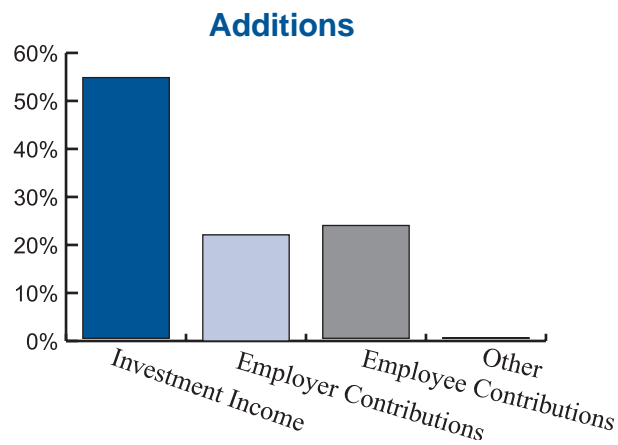
## PSRS Deductions by Type

(Dollar amounts in thousands)

Year	Monthly Benefits	Lump-Sum Refunds	Administrative Expenses	Other	Total
1994	\$ 271,798	\$ 18,681	\$ 2,287		\$ 292,766
1995	300,612	19,731	2,801*	\$ 1	323,145
1996	349,698	23,256	3,763	25,045	401,762
1997	399,875	25,973	3,867	181	429,896
1998	442,850	28,409	2,827**	6	474,092
1999	534,619	31,044	3,137	3	568,803
2000	638,981	36,098	3,710	2	678,791
2001	749,891	35,047	3,995	14	788,947
2002	860,435	31,779	4,439	47	896,700
2003	930,450	28,474	4,674	1	963,599

\*1995 and following years do not include investment fees and expenses.

\*\*Shared expenses were allocated under a new formula beginning in 1998.



## NTRS Additions by Source

(Dollar amounts in thousands)

Year	Employee Contributions	Employer Contributions	Investment Income	Other Income	Total
1994	\$ 17,766	\$ 17,618	\$ 56,613		\$ 91,997
1995	19,249	19,457	112,452*	\$ 25	151,183
1996	21,155	20,967	101,972	6	144,100
1997	24,616	24,394	183,542	11	232,563
1998	27,528	27,316	198,913	11	253,768
1999	30,372	30,013	137,142	17	197,544
2000	34,499	34,186	113,954	14	182,653
2001	37,934	37,500	(29,647)	73	45,860
2002	46,217	45,773	(46,732)	26	45,284
2003	48,994	48,933	73,188	16	171,131

\*Includes recognition of previously deferred income and unrealized gains/losses as a result of adoption of GASB Statement 25.

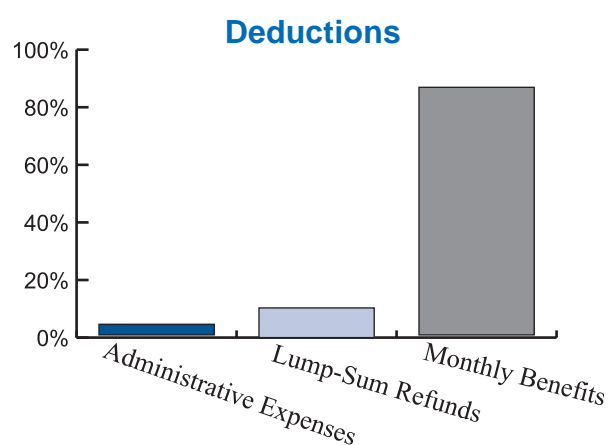
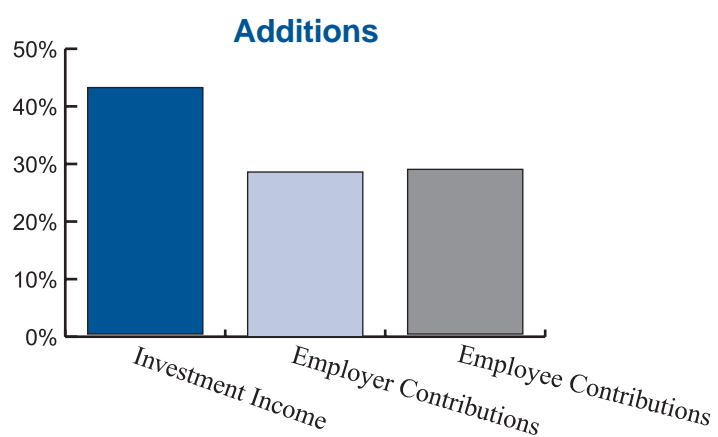
## NTRS Deductions by Type

(Dollar amounts in thousands)

Year	Monthly Benefits	Lump-Sum Refunds	Administrative Expenses	Other	Total
1994	\$ 19,497	\$ 4,256	\$ 901		\$ 24,654
1995	22,067	5,000	690 *		27,757
1996	25,155	5,182	769		31,106
1997	28,265	6,160	884		35,309
1998	31,338	7,121	1,470**	\$ 1	39,930
1999	34,518	7,295	1,604	1	43,418
2000	41,530	9,902	1,919	1	53,352
2001	49,038	9,201	2,242	4	60,485
2002	59,871	7,866	2,574	1	70,312
2003	67,399	8,034	2,946	-	78,379

\*1995 and following years do not include investment fees and expenses.

\*\*Shared expenses were allocated under a new formula beginning in 1998.

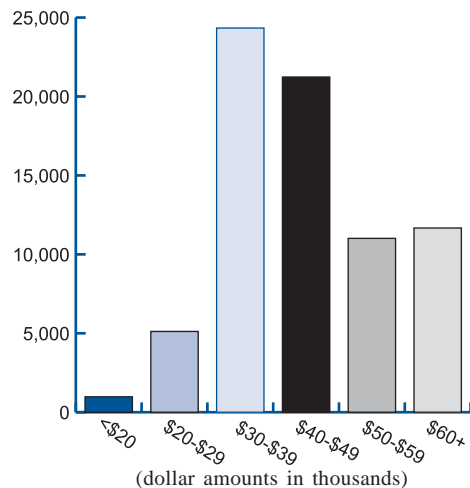


## PSRS Summary of Changes in Membership During 2002-2003

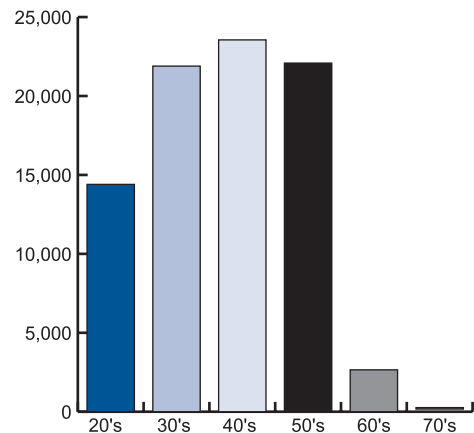
	Male	Female	Total
Membership July 1, 2002	19,063	63,986	83,049
New members added	1,390	4,370	5,760
Less:			
Service retirements	644	1,396	2,040
Disability retirements	6	31	37
Withdrawals	440	1,087	1,527
Deaths	26	45	71
Memberships terminated	81	330	411
Other	8	37	45
	1,205	2,926	4,131
Net change in membership 2002-03	185	1,444	1,629
Membership June 30, 2003	19,248	65,430	84,678

*Note: Seventeen members eligible for retirement died during the year. These are reflected as deaths on this schedule, but as new retirees on page 87.*

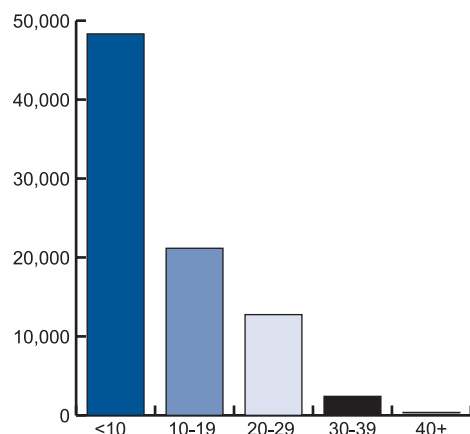
**2002-03 PSRS Members by Annual Salary**



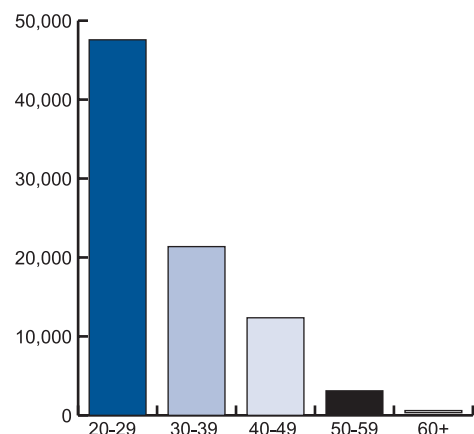
**2002-03 PSRS Members by Current Age**



**2002-03 PSRS Members by Total Service Credit**



**2002-03 PSRS Age at Entry into System**

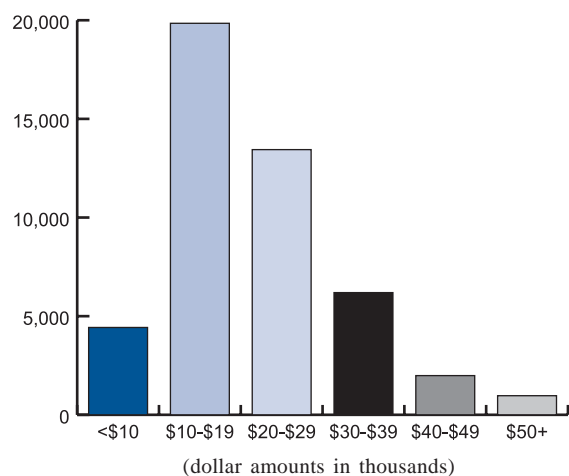


## NTRS Summary of Changes in Membership During 2002-2003

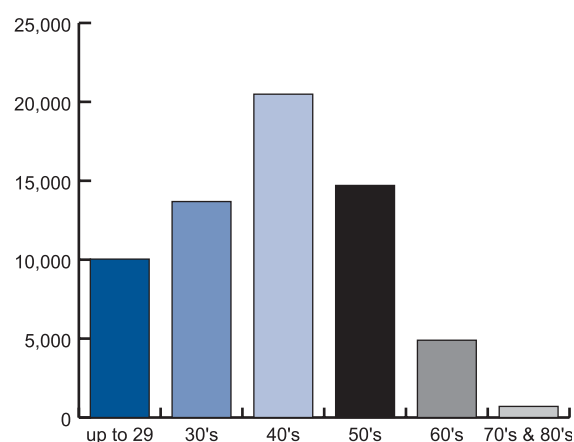
	Male	Female	Total
Membership July 1, 2002	15,457	47,184	62,641
New members added	2,233	5,636	7,869
Less:			
Service retirements	278	682	960
Disability retirements	17	14	31
Withdrawals	1,073	2,615	3,688
Deaths	49	52	101
Memberships terminated	323	759	1,082
Other	37	97	134
	1,777	4,219	5,996
Net change in membership 2002-2003	456	1,417	1,873
Membership June 30, 2003	15,913	48,601	64,514

*Note: Six members eligible for retirement died during the year. These are reflected as deaths on this schedule, but as new retirees on page 88.*

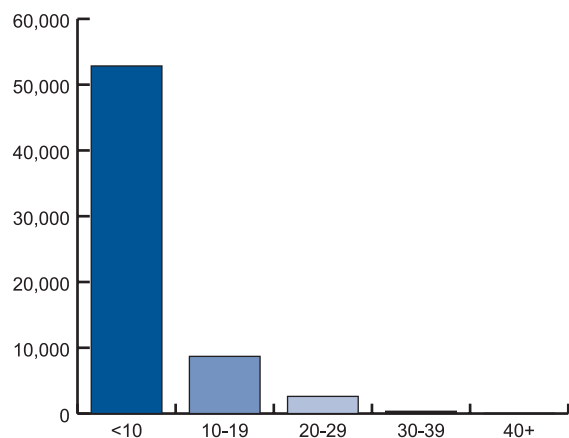
### 2002-03 NTRS Members by Annual Salary



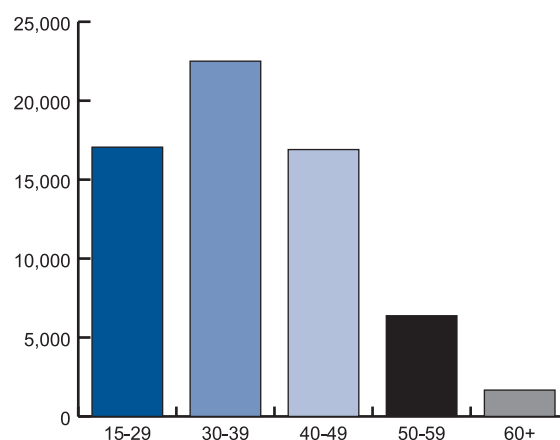
### 2002-03 NTRS Members by Current Age



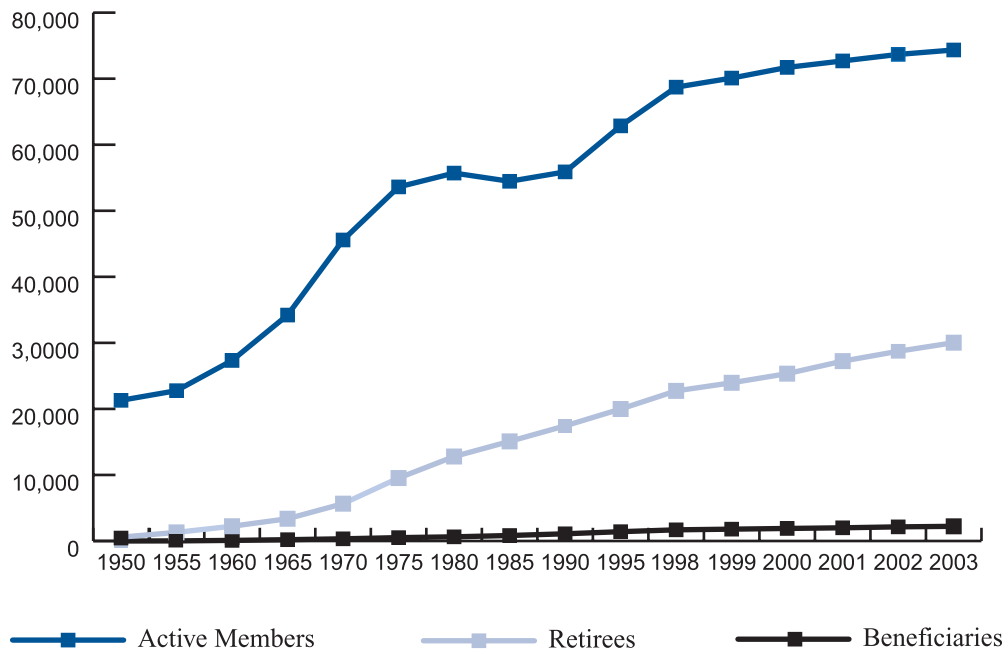
### 2002-03 NTRS Members by Total Service Credit



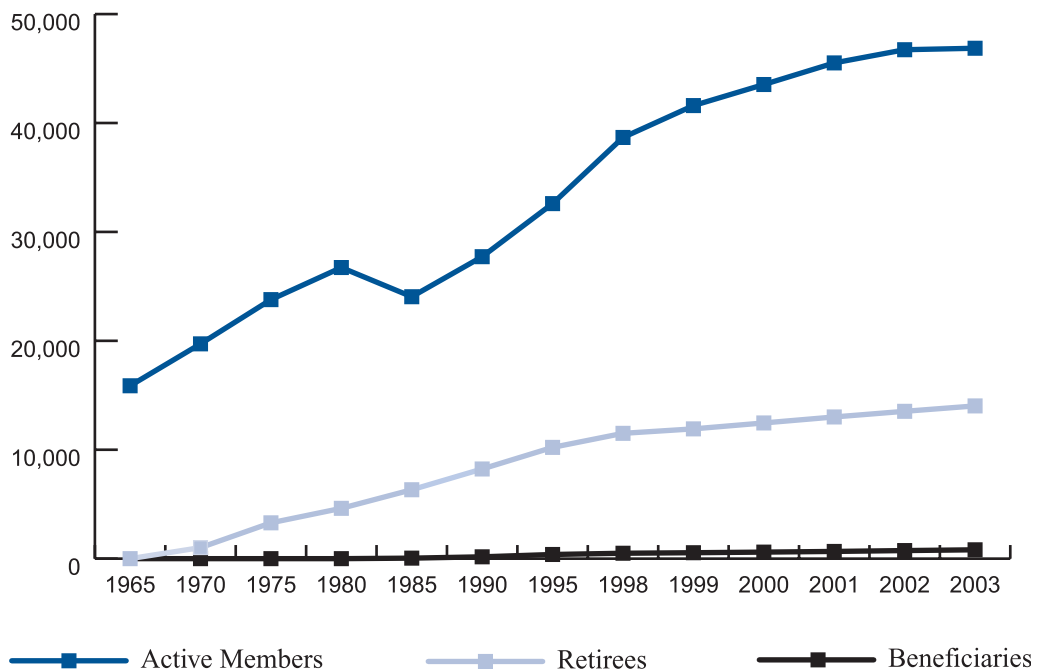
### 2002-03 NTRS Age at Entry into System



## PSRS Growth Through the Years



## NTRS Growth Through the Years

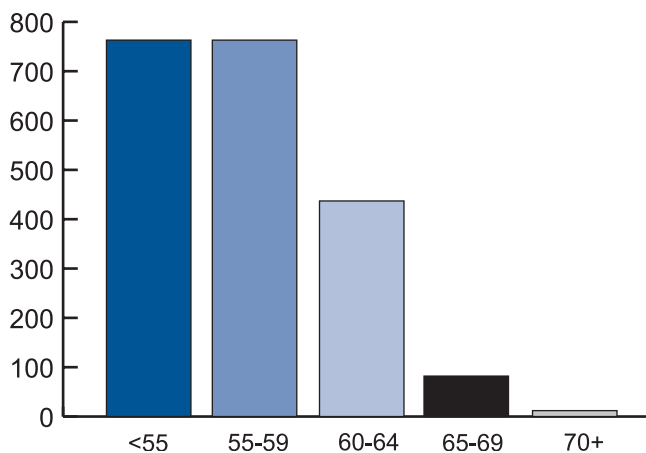


## PSRS 2002-2003 New Service Retirees

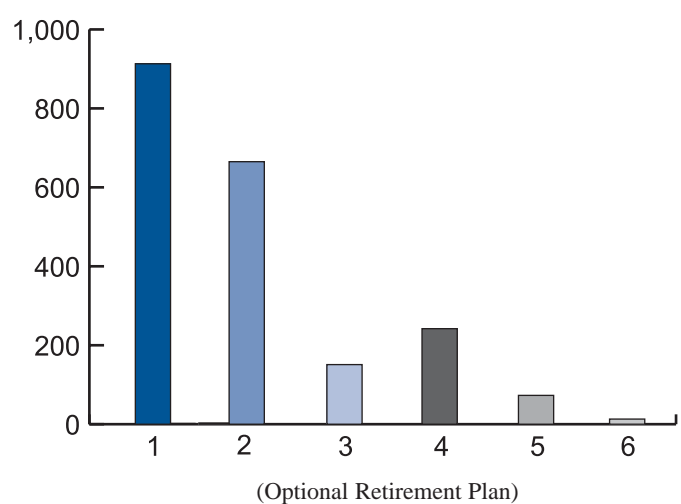
### Summary of Changes in Benefit Payments

	Service Retirees	Disability Retirees	Beneficiaries
Retirees July 1, 2002	28,128	597	2,140
Added during year	2,057	37	194
Died during year	(776)	(29)	(98)
Other	14	(1)	(14)
Retirees June 30, 2003	29,423	604	2,222

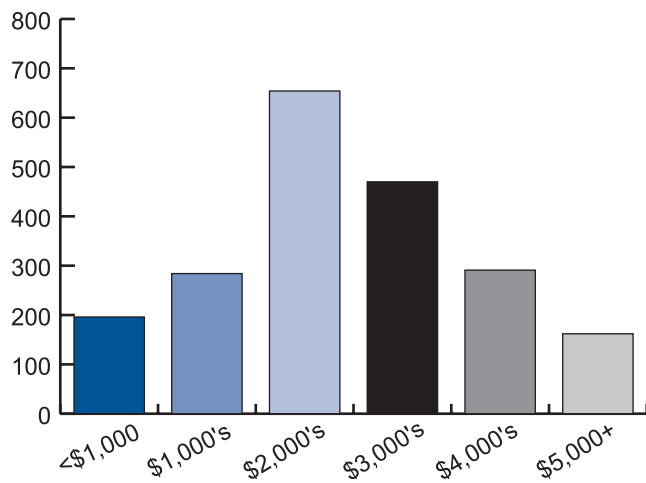
**2002-03 New Service Retirees by Age at Retirement**



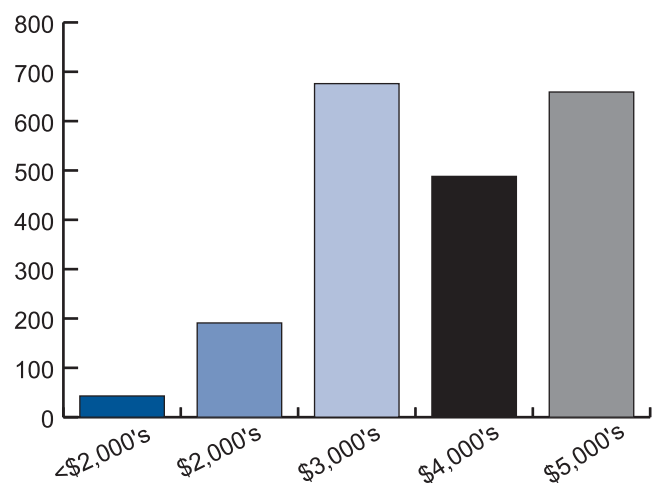
**2002-03 New Service Retirees by Retirement Plan Option**



**2002-03 New Service Retirees by Single Life Benefit Amount**



**2002-03 New Service Retirees by Final Average Salary**

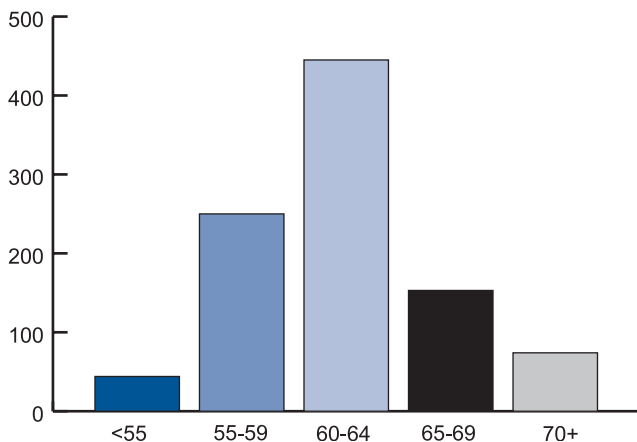


## NTRS 2002-2003 New Service Retirees

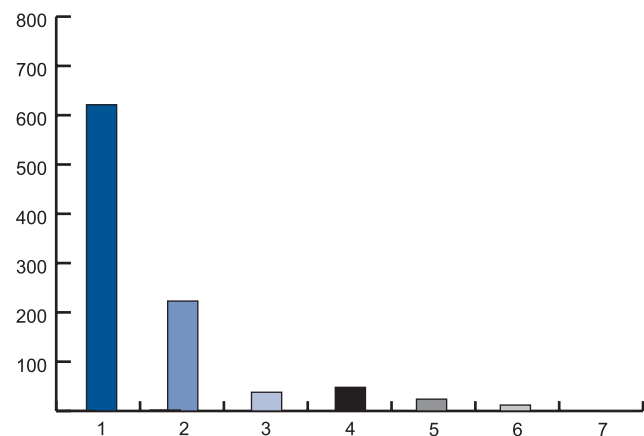
### Summary of Changes in Benefit Payments

	Service Retirees	Disability Retirees	Beneficiaries
Retirees July 1, 2002	13,141	387	742
Added during year	966	31	96
Died during year	(491)	(12)	(25)
Other	3	(1)	0
Retirees June 30, 2003	13,619	405	813

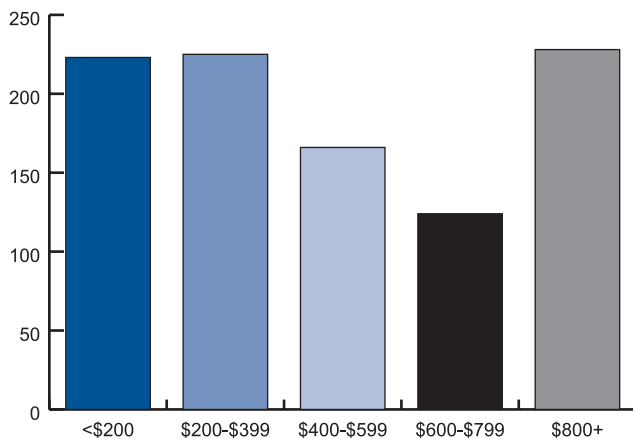
### 2002-03 New Service Retirees by Age



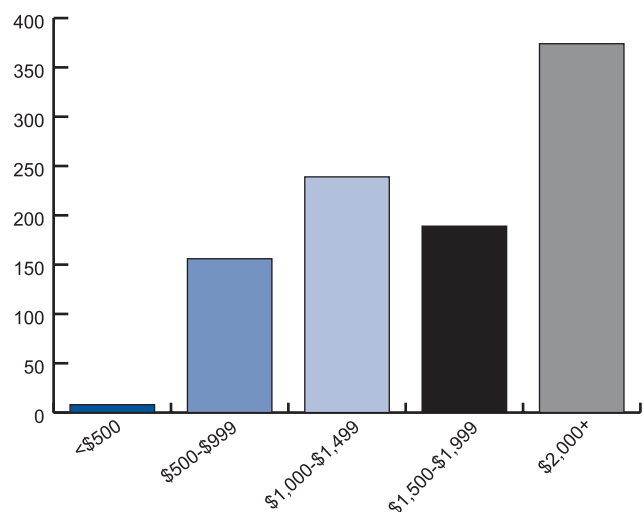
### 2002-03 New Service Retirees by Retirement Plan Option



### 2002-03 New Service Retirees by Single Life Benefit Amount



### 2002-03 New Service Retirees by Final Average Monthly Salary





## PSRS Schedule of Retirees by Type (As of June 30) And Benefits by Type (For the year ended June 30)

(Dollar amounts in thousands)

Year	Service Retirees		Disability Retirees		Beneficiaries	
	Number	Benefits	Number	Benefits	Number	Benefits
1993	18,618	\$ 234,933	560	\$ 5,826	1,303	\$ 9,299
1994	18,963	254,957	556	6,102	1,372	10,373
1995	19,424	281,897	558	6,427	1,412	11,821
1996	20,075	329,115	567	7,180	1,490	13,403
1997	21,140	375,518	566	7,541	1,586	15,856
1998	22,169	417,421	561	7,716	1,691	17,623
1999	23,386	504,517	569	8,717	1,793	21,385
2000	24,759	601,718	580	9,762	1,899	27,501
2001	26,639	706,647	596	10,719	1,999	32,525
2002	28,128	810,898	597	11,621	2,140	37,916
2003	29,423	877,538	604	11,901	2,222	41,011

## PSRS Average New Retiree Statistics

Year Ending June 30	Regular Retirement Benefit	Increase From Previous Year	Age	Creditable Service
1993	\$ 1,854.29	7%	59.0	26.8
1994	2,096.35	12	58.8	27.8
1995	2,013.36	(3)	58.7	26.8
1996	2,182.88	8	56.3	27.8
1997	2,310.25	6	56.9	27.8
1998	2,205.00	(5)	57.1	26.8
1999	2,446.78	10	57.0	26.7
2000	2,708.23	11	57.0	26.4
2001	2,805.75	4	56.7	26.6
2002	2,964.00	6	56.6	26.6
2003	2,962.00	0	56.8	26.0

## NTRS Schedule of Retirees by Type (As of June 30) And Benefits by Type (For the year ended June 30)

*(Dollar amounts in thousands)*

Year	Service Retirees		Disability Retirees		Beneficiaries	
	Number	Benefits	Number	Benefits	Number	Benefits
1994	9,557	\$ 18,534	235	\$ 417	344	\$ 572
1995	9,967	20,842	249	481	383	699
1996	10,376	23,785	267	550	415	820
1997	10,811	26,555	276	598	460	967
1998	11,218	29,599	288	665	497	1,074
1999	11,600	32,548	316	745	545	1,225
2000	12,113	39,072	347	945	601	1,513
2001	12,632	46,093	378	1,122	663	1,823
2002	13,141	56,305	387	1,304	742	2,262
2003	13,619	63,333	405	2,618	813	1,448

## NTRS Average New Retiree Statistics

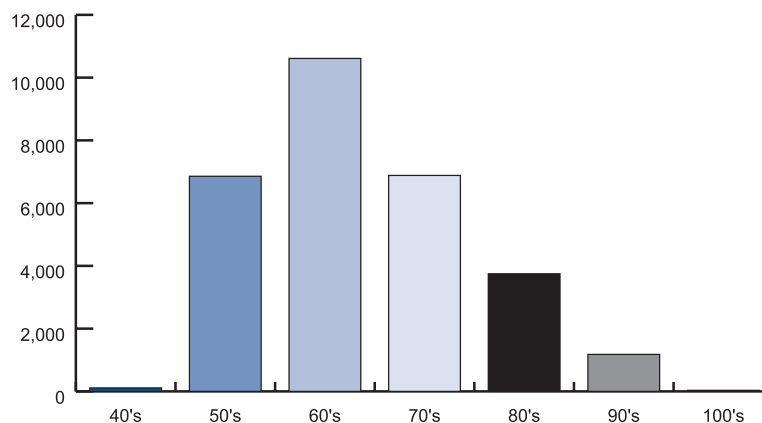
Year Ending June 30	New Service Retirees	Average New Monthly Benefit	% Increase/Decrease From Previous Year
1994	571	\$ 306.20	11%
1995	679	298.76	(3)
1996	797	330.40	11
1997	809	336.86	2
1998	834	338.02	0
1999	796	344.27	2
2000	962	398.09	16
2001	978	475.42	19
2002	966	548.14	15
2003	978	560.64	2

## PSRS Schedule of Average Benefit Payments to New Retirees

Retirement Effective Dates	Years of Credit				
	5-9	10-19	20-29	30-39	40 +
<b>2002-03</b>					
Average monthly benefit	\$ 492.58	\$ 1,294.93	\$ 2,832.05	\$ 4,004.70	\$ 4,240.66
Average final average salary	\$ 3,210.00	\$ 3,591.30	\$ 4,417.68	\$ 4,935.96	\$ 4,240.66
Number of retirees	111	247	930	752	17
<b>2001-02</b>					
Average monthly benefit	\$ 485.88	\$ 1,253.00	\$ 2,738.14	\$ 3,871.70	\$ 4,823.27
Average final average salary	\$ 3,276.23	\$ 3,637.32	\$ 4,248.47	\$ 4,824.01	\$ 4,823.27
Number of retirees	93	232	1,034	875	18
<b>2000-01</b>					
Average monthly benefit	\$ 478.25	\$ 1,164.69	\$ 2,620.89	\$ 3,592.51	\$ 5,430.96
Average final average salary	\$ 3,019.97	\$ 3,245.20	\$ 4,071.52	\$ 4,551.60	\$ 5,430.96
Number of retirees	75	276	1,232	1,027	18
<b>1999-00</b>					
Average monthly benefit	\$ 505.60	\$ 1,127.90	\$ 2,472.05	\$ 3,513.50	\$ 5,208.22
Average final average salary	\$ 2,949.00	\$ 3,309.97	\$ 3,900.41	\$ 4,447.34	\$ 5,209.06
Number of retirees	95	218	913	912	14
<b>1998-99</b>					
Average monthly benefit	\$ 429.45	\$ 994.13	\$ 2,211.31	\$ 3,159.40	\$ 4,455.55
Average final average salary	\$ 2,921.90	\$ 2,827.44	\$ 3,576.31	\$ 3,986.81	\$ 4,531.66
Number of retirees	82	206	1,120	526	12
<b>1997-98</b>					
Average monthly benefit	\$ 443.62	\$ 921.12	\$ 2,008.50	\$ 2,839.48	\$ 3,406.63
Average final average salary	\$ 2,716.17	\$ 2,781.28	\$ 3,502.13	\$ 3,899.53	\$ 3,574.90
Number of retirees	43	203	757	722	23

### Ages of Retirees Receiving Benefits

As of 6/30/2003

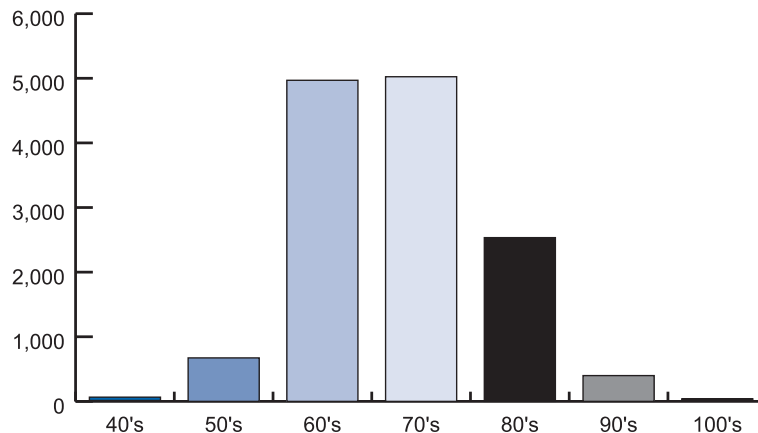


## NTRS Schedule of Average Benefit Payments to New Retirees

Retirement Effective Dates	Years of Credit			
	5-9	10-19	20-29	30 +
<b>2002-03</b>				
Average monthly benefit	\$ 167.07	\$ 401.69	\$ 835.82	\$ 1,249.51
Average final average salary	\$ 1,519.49	\$ 1,737.00	\$ 2,114.51	\$ 2,396.97
Number of retirees	222	338	335	71
<b>2001-02</b>				
Average monthly benefit	\$ 147.18	\$ 372.77	\$ 826.96	\$ 1,355.29
Average final average salary	\$ 1,382.31	\$ 1,644.38	\$ 2,101.53	\$ 2,530.18
Number of retirees	230	324	354	58
<b>2000-01</b>				
Average monthly benefit	\$ 140.88	\$ 345.23	\$ 685.46	\$ 1,149.53
Average final average salary	\$ 1,363.00	\$ 1,644.77	\$ 1,894.10	\$ 2,299.70
Number of retirees	217	371	306	84
<b>1999-00</b>				
Average monthly benefit	\$ 120.36	\$ 309.74	\$ 594.02	\$ 876.45
Average final average salary	\$ 1,188.34	\$ 1,524.28	\$ 1,735.23	\$ 1,852.86
Number of retirees	213	374	307	67
<b>1998-99</b>				
Average monthly benefit	\$ 110.51	\$ 270.07	\$ 507.31	\$ 824.22
Average final average salary	\$ 1,190.23	\$ 1,405.33	\$ 1,580.10	\$ 1,915.99
Number of retirees	187	300	259	50
<b>1997-98</b>				
Average monthly benefit	\$ 105.89	\$ 265.24	\$ 536.23	\$ 734.66
Average final average salary	\$ 1,111.83	\$ 1,400.57	\$ 1,632.67	\$ 1,703.00
Number of retirees	193	344	245	53

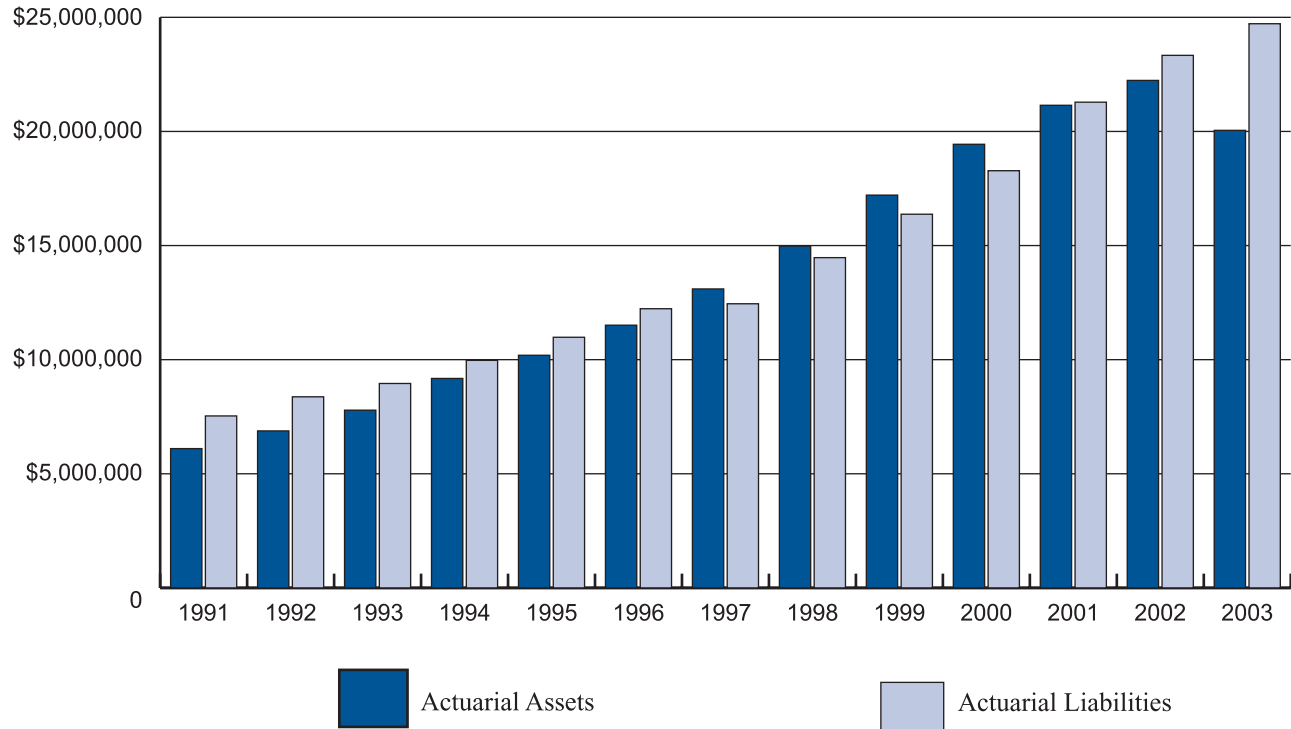
### Ages of Retirees Receiving Benefits

As of 6/30/2003



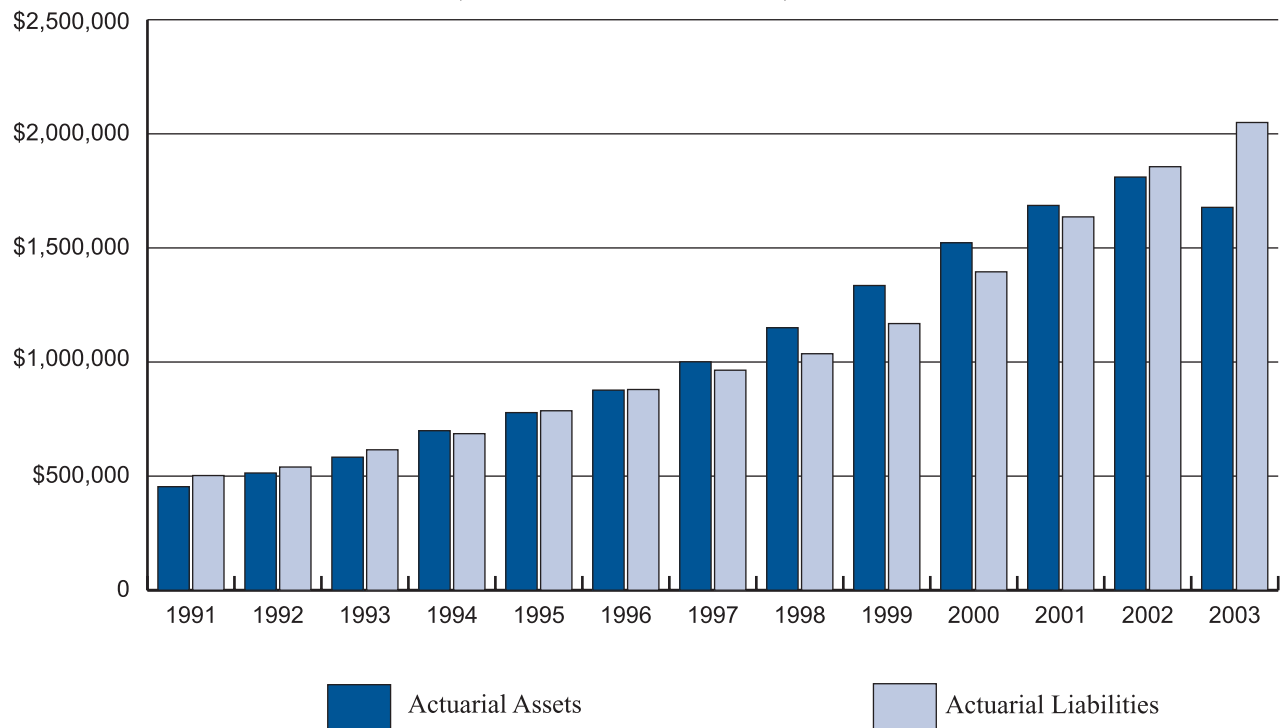
## PSRS Comparison of Actuarial Assets and Total Actuarial Liabilities

(Dollar amounts in thousands)



## NTRS Comparison of Actuarial Assets and Total Actuarial Liabilities

(Dollar amounts in thousands)



## Employees Reported During 2002-2003

DISTRICT	PSRS	NTRS	TOTAL	DISTRICT	PSRS	NTRS	TOTAL
Special School Dist-St. Louis	2647	2044	4,691	Afton 101 Schools	229	192	421
Springfield R-XII Schools	1957	1326	3,283	McDonald County C-1 Schools	269	141	410
Rockwood R-VI Schools	1679	1244	2,923	West Plains R-VII Schools	229	175	404
Parkway C-2 Schools	1706	1199	2,905	Center Public Schools	251	147	398
North Kansas City Schools	1489	1163	2,652	Mexico Public Schools	217	172	389
Hazelwood R-I Schools	1536	963	2,499	Warren County R-III Schools	218	165	383
Columbia Public Schools	1510	954	2,464	Excelsior Springs 40 Schools	251	125	376
Francis Howell R-III Schools	1461	810	2,271	Union R-XI Schools	234	140	374
Ft. Zumwalt R-II Schools	1264	955	2,219	DeSoto Public Schools	217	156	373
Lee's Summit R-VII Schools	1186	983	2,169	Moberly Public Schools	225	147	372
Ferguson-Florissant R-2 School	1134	970	2,104	Jennings Public Schools	241	127	368
Independence Public Schools	933	899	1,832	Nevada R-V Schools	234	128	362
Blue Springs R-IV Schools	983	803	1,786	Bolivar R-I Schools	219	130	349
St. Joseph Public Schools	994	627	1,621	Carl Junction R-I Schools	221	128	349
Fox C-6 Schools	843	505	1,348	Marshall Public Schools	228	115	343
Park Hill Schools	766	579	1,345	Perry County 32 Schools	213	129	342
Raytown C-2 Schools	687	538	1,225	Marshfield R-I Schools	229	103	332
Mehlville R-IX Schools	801	408	1,209	Republic R-III Schools	221	109	330
Metropolitan Community College	504	686	1,190	Jefferson College	183	137	320
Liberty Public Schools	626	561	1,187	Kearney R-1 Schools	227	92	319
Jefferson City Public Schools	731	418	1,149	Kennett 39 Public Schools	189	129	318
Joplin R-VIII Schools	638	448	1,086	Harrisonville R-IX Schools	207	111	318
Hickman Mills C-1 Schools	684	373	1,057	Chillicothe R-II Schools	194	122	316
Pattonville R-III Schools	609	392	1,001	Dallas County R-I Schools	181	135	316
St. Louis Community College	980	0	980	St. Clair R-XIII Schools	191	121	312
Wentzville R-IV Schools	520	428	948	Platte County R-III Schools	208	102	310
Riverview Gardens Schools	538	386	924	Clinton School District	192	113	305
Northwest R-I Schools	558	358	916	Monett R-I Schools	186	115	301
Fort Osage R-I Schools	425	389	814	Crowder College	203	96	299
St. Charles County R-VI Schools	545	245	790	Festus R-VI Schools	177	121	298
Kirkwood R-VII Schools	455	295	750	Eldon R-I Schools	181	117	298
Normandy Public Schools	414	315	729	Moberly Area Community College	207	89	296
Waynesville R-VI Schools	470	238	708	Reeds Spring R-IV Schools	182	114	296
Grandview C-4 Schools	407	300	707	Aurora R-VIII Schools	177	113	290
Ritenour Public Schools	461	195	656	State Fair Community College	211	78	289
Poplar Bluff R-I Schools	394	258	652	Odessa R-VII Schools	208	78	286
Cape Girardeau Public Schools	410	238	648	Savannah R-III Schools	190	96	286
Sikeston R-VI Schools	330	291	621	New Madrid County R-I Schools	189	90	279
Lindbergh R-VIII Schools	418	199	617	Potosi R-III Schools	176	100	276
Belton 124 Public Schools	370	245	615	Cassville R-IV Schools	144	131	275
University City Public Schools	359	245	604	Grain Valley R-V Schools	161	112	273
Jackson R-II Schools	344	257	601	Dexter R-XI Schools	161	108	269
Sedalia 200 Public Schools	361	232	593	Knob Noster R-VIII Schools	173	94	267
Rolla 31 Public Schools	354	231	585	Sullivan C-2 Schools	175	87	262
Webster Groves Public Schools	348	226	574	St. James R-I Schools	143	118	261
Hannibal 60 Public Schools	345	225	570	Mineral Area Community College	174	86	260
Raymore-Peculiar R-II Schools	348	219	567	Gasconade County R-II Schools	155	102	257
Camdenton R-III Schools	332	228	560	Mountain Grove R-III Schools	148	104	252
St. Charles Community College	312	247	559	Central R-III Schools	152	97	249
Lebanon R-III Schools	331	228	559	Fredericktown R-I Schools	148	99	247
Washington Public Schools	331	213	544	Maryville R-II Schools	165	80	245
Neosho R-V Schools	327	212	539	Ste. Genevieve R-II Schools	155	89	244
Ladue Public Schools	369	164	533	Cameron R-I Schools	155	82	237
Meramec Valley R-III Schools	294	226	520	Greene Co. R-VIII Schools	146	87	233
Clayton Public Schools	330	187	517	East Central College	146	86	232
Carthage R-IX Schools	298	199	497	Salem R-80 Schools	126	103	229
Webb City R-VII Schools	272	215	487	Oak Grove R-VI Schools	146	83	229
Troy R-III Schools	303	180	483	Richmond R-XVI Schools	144	84	228
Farmington R-VII Schools	308	168	476	Three Rivers Community College	165	61	226
Ozarks Technical Community College	311	158	469	Morgan County R-II Schools	139	86	225
Warrensburg R-VI Schools	287	167	454	Boonville R-I Schools	146	75	221
Nixa R-II Schools	338	114	452	School of the Osage R-II Schools	141	79	220
Willard R-II Schools	287	162	449	North Central Missouri College	103	117	220
N. St. Francois R-I Schools	262	183	445	Pleasant Hill R-III Schools	151	66	217
Fulton Public Schools	227	217	444	Seneca R-VII Schools	136	80	216
Windsor C-1 Schools	265	176	441	Winfield R-IV Schools	125	85	210
Branson R-IV Schools	246	191	437	Caruthersville 18 Schools	143	67	210
Hillsboro R-III Schools	244	183	427	St. Charles County R-V Schools	117	93	210
Kirksville R-3 School District	245	176	421	Bowling Green R-I Schools	131	76	207
Ozark R-VI Schools	293	128	421	Macon County R-1 Schools	129	77	206

DISTRICT	PSRS	NTRS	TOTAL	DISTRICT	PSRS	NTRS	TOTAL
Doniphan R-I Schools	137	66	203	Laclede County R-I Schools	73	50	123
Lamar R-I Schools	129	74	203	W. St. Francois R-IV Schools	88	36	123
Ava R-I Schools	134	66	200	Monroe City R-I Schools	80	43	123
Montgomery County R-II Schools	127	71	198	Schuyler County R-I Schools	73	50	123
Smithville R-II Schools	144	53	197	Osage County R-III Schools	82	40	122
Holden R-III Schools	121	75	196	Putnam County R-I Schools	82	40	122
Charleston R-I Schools	110	86	196	North Platte County R-1 Schools	80	41	121
Dunklin R-V Schools	118	76	194	Alton R-IV Schools	71	50	121
Willow Springs R-IV Schools	120	74	194	Spokane R-VII Schools	72	49	121
Brookfield R-III Schools	125	68	193	Lathrop R-II Schools	82	39	121
Warsaw R-IX Schools	105	87	192	Jefferson County R-VII Schools	59	61	120
Hollister R-V Schools	107	84	191	Windsor R-I Schools	68	51	119
North Callaway County R-I Schools	127	63	190	Sarcozie R-II Schools	65	53	118
Maplewood-Richmond Heights Sch	113	77	190	Miller R-II Schools	72	46	118
Hancock Place Public Schools	140	49	189	Maries County R-II Schools	74	44	118
Mountain View R-3 Schools	122	66	188	Diamond R-IV Schools	66	51	117
Lexington R-V Schools	127	56	183	Southwest R-V Schools	73	44	117
Wright City R-II Schools	114	68	182	Knox County R-I Schools	72	45	117
East Newton County R-VI Schools	124	55	179	Pike County R-III Schools	69	48	117
Clearwater R-I Schools	96	80	176	Elsberry R-II Schools	77	40	117
Palmyra R-I Schools	105	70	175	Westran R-I Schools	74	42	116
Lafayette County C-1 Schools	109	66	175	Jasper County R-V Schools	67	46	113
Southern Boone County R-I Schools	123	51	174	Puxico R-VIII Schools	69	44	113
Trenton R-IX Schools	112	61	173	Portageville Schools	75	38	113
Moniteau County R-I Schools	112	61	173	Grandview R-II Schools	71	41	112
Crawford County R-II Schools	117	55	172	Cole County R-V Schools	73	38	111
Valley Park Public Schools	111	59	170	Woodland R-IV Schools	79	32	111
Strafford R-VI Schools	101	66	167	Pierce City R-VI Schools	73	38	111
Mt. Vernon R-V Schools	116	50	166	Hickory County R-I Schools	66	45	111
Houston R-I Schools	110	56	166	Pemiscot County Special Schools	61	50	111
Boone County R-IV Schools	107	58	165	Marceline R-V Schools	75	36	111
East Prairie R-II Schools	91	73	164	Hamilton R-II Schools	71	39	110
Forsyth R-III Schools	94	68	162	Milan C-2 Schools	69	40	109
Malden R-I Schools	110	52	162	Cole County R-I Schools	71	37	108
El Dorado Springs R-II Schools	109	51	160	Bloomfield R-XIV Schools	69	38	107
Arcadia Valley R-II Schools	110	50	160	Purdy R-II Schools	68	39	107
Carrollton R-VII Schools	98	60	158	Senath-Hornersville C-8 School	69	38	107
South Callaway County R-II Schools	99	58	157	Clinton County R-III Schools	79	28	107
Crawford County R-I Schools	89	67	156	Cole Camp R-I Schools	65	42	107
Brentwood Public Schools	99	54	153	Van-Far R-I Schools	73	34	107
Twin Rivers R-X Schools	97	56	153	Scotland County R-I Schools	66	41	107
Centralia R-VI Schools	109	43	152	East Carter County R-II Schools	72	35	107
Lewis County C-1 Schools	102	48	150	Fayette R-3 Schools	79	27	106
Gasconade County R-I Schools	99	50	149	Laquey R-V Schools	63	43	106
South Harrison County R-2 Schools	91	57	148	Callaway County R-III Schools	64	41	105
Clark County R-I Schools	102	45	147	Ash Grove R-IV Schools	74	31	105
Stockton R-I Schools	90	56	146	Sparta R-III Schools	68	36	104
Dixon R-1 Schools	89	55	144	Marionville R-IX Schools	70	34	104
Kingston K-14 Schools	83	59	142	Gainesville R-V Schools	65	39	104
Fair Grove R-X Schools	92	48	140	Norwood R-I Schools	54	48	102
Butler R-V Schools	98	42	140	Hartville R-II Schools	70	32	102
Bayless Public Schools	107	31	138	East Buchanan County C-1 Schools	76	26	102
Steelville R-III Schools	80	58	138	Iberia R-V Schools	65	36	101
Lawson R-XIV Schools	101	36	137	Fordland R-III Schools	63	37	100
Wellston Public Schools	77	57	134	Mansfield R-IV Schools	66	34	100
Seymour R-II Schools	79	54	133	Neelyville R-IV Schools	60	39	99
Louisiana R-II Schools	79	53	132	West Platte County R-II Schools	68	31	99
Pleasant Hope R-VI Schools	94	38	132	Public School Retirement System of MO	6	92	98
MO Dept. of Elementary & Secondary Education	130	0	130	Morgan County R-I Schools	66	32	98
Osage County R-II Schools	73	56	129	Crane R-III Schools	70	28	98
Scott City R-I Schools	82	47	129	Adrian R-III Schools	63	34	97
Ralls County R-II Schools	89	39	128	Marion C. Early R-5 Schools	64	31	95
Greenville R-II Schools	74	54	128	Paris R-II Schools	58	37	95
Scott County R-IV Schools	88	40	128	Thayer R-II Schools	62	32	94
Cabool R-IV Schools	79	49	128	Campbell R-II Schools	59	35	94
Sherwood Cass R-VIII Schools	81	46	127	Gallatin R-V Schools	62	32	94
Shelby County R-IV Schools	77	50	127	Smithton R-VI Schools	57	36	93
Hayti R-II Schools	87	40	127	Albany R-III Schools	53	40	93
Licking R-VIII Schools	75	50	125	Salisbury R-IV Schools	54	39	93
Blue Eye R-V Schools	75	49	124	Canton R-V Schools	58	34	92

DISTRICT	PSRS	NTRS	TOTAL	DISTRICT	PSRS	NTRS	TOTAL
Meadow Heights R-II Schools	59	33	92	Sweet Springs R-VII Schools	46	19	65
Crystal City Public Schools	67	24	91	Richland R-I Schools	38	27	65
Pulaski Co. R-IV Schools	60	31	91	Bakersfield R-IV Schools	35	29	64
Johnson Co. R-VII Schools	61	29	90	Billings R-IV Schools	47	17	64
Cole Co. R-II Schools	61	29	90	Wheatland R-II Schools	36	28	64
Clever R-V Schools	63	26	89	Wellington-Napoleon R-IX Sch.	44	20	64
South Pemiscot Co. R-V Schools	65	24	89	Laclede County C-5 Schools	40	24	64
Tarkio R-I Schools	57	31	88	Dora R-III Schools	37	26	63
Van Buren R-I Schools	56	32	88	Adair Co. R-1 Schools	37	25	62
Liberal R-II Schools	53	34	87	Naylor R-II Schools	39	23	62
Mid-Buchanan Co R-V Schools	63	24	87	Nodaway-Holt R-VII Schools	37	25	62
Concordia R-II Schools	55	31	86	Green City R-I Schools	38	23	61
Moniteau Co. R-VI Schools	55	31	86	Kirbyville R-VI Schools	37	24	61
Plato R-V Schools	51	34	85	North Pemiscot R-I Schools	40	21	61
Greenfield R-IV Schools	51	34	85	North Andrew Co. R-VI Schools	42	19	61
Maysville R-I Schools	68	17	85	South Iron Co. R-I Schools	42	19	61
Valley R-VI Schools	51	34	85	Advance R-IV Schools	44	17	61
Newburg R-II Schools	52	31	83	Fair Play R-II Schools	40	21	61
Chaffee R-II Schools	50	33	83	Orrick R-XI Schools	41	20	61
Southern Reynolds R-II Schools	47	36	83	Gentry County R-II Schools	40	21	61
Wellsville Middletown R-1 Sch.	49	33	82	Exeter R-VI Schools	36	24	60
West Nodaway Co. R-I Schools	57	24	81	Oak Ridge R-VI Schools	37	23	60
Camden County R-II Schools	51	30	81	Southland C-9 Schools	39	21	60
Lakeland R-III Schools	50	30	80	Hermitage R-IV Schools	32	26	58
Winona R-III Schools	53	27	80	North Nodaway Co. R-VI Schools	36	22	58
Fairview R-XI Schools	52	28	80	Clarkton C-4 Schools	33	23	56
Bismarck R-V Schools	56	24	80	Macks Creek R-5 Schools	41	15	56
Midway R-I Schools	51	28	79	LaMonte R-IV Schools	40	16	56
Lincoln R-II Schools	49	30	79	Lockwood R-I Schools	38	18	56
Summersville R-II Schools	56	23	79	Silex R-I Schools	36	19	55
Sturgeon R-V Schools	46	33	79	Howard County R-II Schools	39	16	55
Iron Co. C-4 Schools	44	35	79	Shelby Co. C-1 Schools	40	15	55
Galena R-II Schools	48	30	78	South Holt Co. R-1 Schools	42	13	55
Lesterville R-IV Schools	42	36	78	Gideon 37 Public Schools	36	19	55
Harrisburg R-VIII Schools	44	33	77	NE Nodaway Co. R-V Schools	36	17	53
Lonedell R-XIV Schools	43	34	77	Niangua R-5 Schools	40	13	53
Lone Jack C-6 Schools	48	29	77	Halfway R-III Schools	34	19	53
Appleton City R-II Schools	52	24	76	Pilot Grove C-4 Schools	33	19	52
Slater Public Schools	54	22	76	Northeast Vernon Co. R-I	30	22	52
Crocker R-II Schools	45	30	75	Walnut Grove R-V Schools	34	17	51
Rich Hill R-IV Schools	45	29	74	Holt Co. R-II Schools	35	16	51
Coop. Sch. Dist. of St. Louis	13	60	73	Dent-Phelps R-III Schools	29	22	51
King City R-I Schools	47	26	73	Linn Co. R-I Schools	34	16	50
Pettis Co. R-V Schools	47	26	73	Delta R-V Schools	35	15	50
Osceola Schools	51	22	73	Drexel R-IV Schools	38	12	50
Wheaton R-III Schools	44	28	72	Bunker R-III Schools	30	20	50
Rock Port R-II Schools	49	23	72	Oregon-Howell R-III Schools	35	14	49
Santa Fe R-X Schools	48	24	72	Grundy Co. R-V Schools	27	22	49
NE Randolph R-IV Schools	46	26	72	Miller County R-III Schools	31	18	49
Maries Co. R-I Schools	50	22	72	Chadwick R-I Schools	32	16	48
Princeton R-V Schools	51	21	72	Couch R-I Schools	30	18	48
Buchanan Co. R-IV Schools	47	24	71	Lutie R-VI Schools	30	18	48
Cass Co. R-V Schools	49	22	71	Madison C-3 Schools	33	14	47
New Franklin R-1 Schools	44	27	71	Kingsville R-I Schools	31	16	47
New Haven Public Schools	46	25	71	Zalma R-V Schools	29	18	47
Holcomb R-III Schools	45	25	70	Nell Holcomb R-IV Schools	33	14	47
Scott County Central Schools	47	23	70	Glenwood R-VIII Schools	32	15	47
Bernie R-XIII Schools	49	21	70	Fairfax R-III Schools	32	15	47
Leeton R-X Schools	40	30	70	Calhoun R-VIII Schools	26	21	47
Humansville R-IV Schools	45	24	69	St. Elizabeth R-IV Schools	30	17	47
Green Ridge R-VIII Schools	42	27	69	Brunswick R-II Schools	31	16	47
LaPlata R-II Schools	45	23	68	Hurley R-I Schools	34	13	47
Polo R-VII Schools	45	23	68	Bronaugh R-VII Schools	31	16	47
Verona R-VII Schools	43	25	68	Eminence R-I Schools	30	17	47
Weaubleau R-III Schools	42	26	68	Otterville R-VI Schools	30	17	47
Climax Springs R-IV Schools	31	36	67	Bevier C-4 Schools	31	15	46
Braymer C-4 Schools	42	25	67	Adair County R-II Schools	28	18	46
Community R-VI Schools	40	26	66	Tri-County R-VII Schools	30	16	46
Richards R-V Schools	43	22	65	Oran R-III Schools	34	12	46
Worth Co. R-III Schools	44	21	65	North Wood R-IV Schools	23	22	45



DISTRICT	PSRS	NTRS	TOTAL	DISTRICT	PSRS	NTRS	TOTAL
Marion County R-II Schools	31	14	45	Montrose R-XIV Schools	19	8	27
Taneyville R-II Schools	28	16	44	East Lynne Public Schools	17	10	27
South Nodaway County R-IV Schools	28	16	44	Ripley County R-III Schools	16	10	26
Stewartsville C-2 Schools	32	12	44	Leesville R-IX Schools	11	15	26
Delta C-7 Schools	29	14	43	Pleasant View R-VI Schools	16	9	25
North Harrison County R-3 Schools	28	15	43	Pemiscot County R-III Schools	15	10	25
Miami R-I Schools	27	16	43	Pettis County R-XII Schools	15	10	25
Osage County R-I Schools	31	12	43	Skyline R-II Schools	13	11	24
North Mercer County R-III Schools	28	15	43	Clarksburg C-2 Schools	17	6	23
Keytesville R-III Schools	25	18	43	Livingston County R-III Schools	12	11	23
Sheldon R-VIII Schools	27	15	42	Miami R-1 Schools	15	7	22
Shell Knob Public Schools	30	12	42	Plainview R-VIII Schools	14	7	21
Junction Hill C-12 Schools	26	16	42	Hardeman R-X Schools	10	10	20
Meadville R-IV Schools	27	15	42	Centerville R-I Schools	11	9	20
Pattonburg R-II Schools	30	11	41	Blackwater R-II Schools	16	4	20
Golden City R-III Schools	28	13	41	Laredo R-VII Schools	11	9	20
Norborne R-VIII Schools	28	13	41	Gasconade C-4 Schools	12	8	20
Bell City R-II Schools	31	10	41	Avenue City R-IX Schools	16	3	19
Gilman City R-IV Schools	26	15	41	Kelso C-7 Schools	12	7	19
SW Livingston County R-1 Schools	29	12	41	Gorin R-III Schools	11	8	19
Breckenridge R-1 Schools	22	18	40	Thornfield R-I Schools	14	5	19
Everton R-III Schools	26	14	40	Wyaconda C-1 Schools	13	6	19
Risco R-II Schools	24	16	40	High Point R-III Schools	11	6	17
Tina-Avalon R-II Schools	25	15	40	Cowgill R-VI Schools	10	7	17
Sunrise R-IX Schools	30	10	40	Luray 33 Public Schools	9	8	17
Bucklin R-II Schools	26	14	40	Callao C-8 Schools	13	4	17
Jefferson C-123 Schools	28	12	40	Spickard R-II Schools	9	8	17
Atlanta C-3 Schools	22	17	39	Shawnee R-III Schools	8	8	16
Marquand Zion R-VI Schools	26	13	39	Strain-Japan R-XVI Schools	11	5	16
Franklin County R-II Schools	19	19	38	Orearville R-IV Schools	11	5	16
Dadeville R-II Schools	31	7	38	New York R-IV Schools	10	6	16
Cooper County R-IV Schools	26	12	38	Holliday C-2 Schools	8	8	16
Bradleyville R-I Schools	26	12	38	MO State Teachers Association	16	0	16
Moniteau County C-1 Schools	27	11	38	Revere C-3 Schools	10	6	16
Renick R-V Schools	19	19	38	Kingston Public Schools	10	5	15
Avilla R-XIII Schools	20	17	37	Altenburg 48 Schools	9	5	14
Macon County R-IV Schools	26	11	37	Gilliam C-4 Schools	10	3	13
Winston R-VI Schools	26	11	37	Davis R-XII Schools	5	8	13
Phelps County R-III Schools	18	19	37	Moniteau County R-V Schools	9	4	13
Northwestern R-I Schools	26	10	36	Mark Twain R-VIII Schools	8	5	13
Prairie Home R-V Schools	26	10	36	Manes R-V Schools	8	5	13
Hardin-Central C-2 Schools	27	9	36	Swedeberg R-III Schools	9	4	13
Success R-VI Schools	18	17	35	Mirabile C-1 Schools	9	3	12
Cooter R-IV Schools	25	10	35	Middle Grove C-1 Schools	8	4	12
North Daviess County R-III Schools	21	13	34	Roscoe C-1 Schools	7	5	12
Union Star R-II Schools	25	9	34	Missouri City Public Schools	5	7	12
Higbee R-VIII Schools	23	11	34	Boncl R-X Schools	8	4	12
Malta Bend R-V Schools	24	10	34	Hudson R-IX Schools	6	4	10
Hale R-I Schools	25	8	33	MO Council of School Administrators	0	6	6
Ballard R-II Schools	20	13	33	MO High School Activity Association	5	0	5
Green Forest R-II Schools	17	16	33	Southwest MO State University	4	0	4
Craig R-III Schools	22	11	33	MO Division of Youth Services	2	0	2
Howell Valley R-I Schools	17	16	33	MO Southern State College	2	0	2
Ridgeway R-V Schools	21	12	33	Truman State University	2	0	2
Leopold R-III Schools	21	11	32	MO Department of Corrections	1	0	1
Osborn R-O Schools	25	7	32	MO Department of Mental Health	1	0	1
Bosworth R-V Schools	20	12	32	Harris-Stowe State College	1	0	1
Newtown-Harris R-III Schools	17	15	32				
Chilhowee R-IV Schools	24	8	32				
Westview C-6 Schools	19	12	31				
Spring Bluff R-XV Schools	19	12	31				
Bellevue R-III Schools	16	15	31				
Hume R-VIII Schools	21	10	31				
Cainsville R-I Schools	19	11	30				
Richwoods R-VII Schools	18	12	30				
Raymondville R-VII Schools	18	12	30				
Oak Hill R-I Schools	16	13	29				
Ripley County R-IV Schools	17	12	29				
Strasburg C-3 Schools	18	11	29				
Stet R-XV Schools	16	13	29				

**For more information on  
The Public School Retirement System of Missouri and/or  
the Non-Teacher School Employee Retirement System of Missouri,  
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Comprehensive Annual Financial Report for the Year Ended June 30, 2003

